



Precise Research.
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Analytical Report

TACONIC

Analysis of PFOA in Water and Soil Samples

Exygen Report No. L0006042

Testing Laboratory

Exygen Research
3058 Research Drive
State College, PA 16801

Requester

Andrew Kawczak
TACONIC
136 Coonbrook Road
Petersburgh, New York, 12138
Phone: 518-658-3202

8/2005

PAGE 1 OF 5

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TAC EPA 00430

000421

1. Introduction

Results are reported for the analysis of perfluorooctanoic acid (PFOA) in water and soil samples received at Exygen from Andrew Kawczak at TACONIC. The Exygen project number assigned to the samples is L0006042. Table I lists the target analytes quantitated for the samples.

Table I. Target Analytes for Quantitation

<u>Parameter</u>	<u>Acronym</u>	<u>Formula</u>
Perfluorooctanoic acid	PFOA	C ₇ F ₁₅ COOH

2. Sample Receipt

Ten water samples and one soil sample were received at Exygen in 500 mL clear plastic bottles. A copy of all sample log-in information is presented in Attachment A.

The samples were received on 08/27/05. The samples were shipped on ice via UPS. The samples were stored refrigerated from time of receipt until analysis.

3. Methods - Analytical and Preparatory

3.1 Water Sample Preparation

There was no preparation necessary for the water samples. A portion of the extract was diluted in methanol, transferred to autosampler vials, and analyzed using electrospray LC/MS/MS.

3.2 Soil Sample Preparation

A one-gram portion of the soil sample was weighed into a 50 mL polypropylene centrifuge tube. Ten milliliters of methanol was added to the sample. The sample was shaken on a wrist action shaker for ~2 hours and then sonicated for ~2 hours. The sample was then centrifuged at ~3000 rpm for ~10 minutes. The supernatant was transferred to an autosampler vial and analyzed using electrospray LC/MS/MS.

3.3 Sample Analysis by LC/MS/MS

In High Pressure Liquid Chromatography (HPLC), an aliquot of extract is injected and passed through a liquid-phase chromatographic column. Based on the affinity of the analyte for the stationary phase in the column relative to the liquid mobile phase, the analyte is retained for a characteristic amount of time. Following HPLC separation, mass spectrometry provides a rapid

and accurate means for analyzing a wide range of organic compounds. Molecules are ionized, fragmented, and detected. The ions characteristic of the compounds are observed and quantitated against extracted standards.

An HP1100 system interfaced to a Micromass Quattro system was used to analyze the sample extracts for quantitation. A gradient elution through a Jones Chromatography Genesis C-8 50 x 2.1 mm x 4 μ m column was used for separation.

The following gradient was performed:

Mobile Phase (A): 2mM Ammonium Acetate in Water
Mobile Phase (B): Methanol

Time	%A	%B
0.0	90	10
2.0	90	10
5.0	10	90
9.0	10	90
9.5	0	100
14.0	0	100
14.5	90	10
20.0	90	10

The following parameters were used for operation of the mass spectrometer:

Parameter	Setting
Ionization Mode	Electrospray
Polarity	Negative
Transitions Monitored	413->369 (PFOA)
Gas Temperature	350°C
Drying Gas (N2)	7.0 L/min

4 Analysis

4.1 Calibration

A 6-point calibration curve was analyzed throughout the analytical sequence for PFOA. The calibration points were prepared at 0.2, 0.5, 1, 5, 10 and 50 ng/mL for LC/MS/MS analysis. The instrument response versus the concentration was plotted for each point. Using linear regression with 1/x weighting, the slope, y-intercept and coefficient of determination (r^2) were determined. A calibration curve is acceptable if $r^2 \geq 0.985$.

For the results reported here, calibration criteria were met. The calibration curves are included in the raw data in Attachment C.

4.2 Laboratory Control Spikes

Laboratory control spikes in the analytical set were prepared by adding a known concentration of the analyte to laboratory water. Laboratory control spikes are used to assess method accuracy. The laboratory control spikes must show recoveries between 70-130% or the data is rejected. For the results reported here, the laboratory control spikes were within the acceptable range.

4.3 Matrix Spikes

Two matrix spikes were prepared in the analytical set by adding a known concentration of the target analyte to a separate sample. Matrix spikes are used to assess method accuracy in the matrix. The matrix spikes should show recoveries between 70-130%. For the results reported here the matrix spikes were within the acceptable range. Matrix spike recoveries can be found in Attachment B.

4.4 Sample Related Comments

Two samples were analyzed in duplicate. Duplicate sample results are reported along with the sample results in Attachment B.

5 Data Summary

Please see Attachment B for a detailed listing of the analytical results. For the water samples, results are reported in parts per billion (ng/mL) for the analyte, PFOA. For the soil sample, results are reported in parts per billion (ng/g) for the analyte, PFOA, wet weight.

6 Data/Sample Retention

Samples are disposed of one month after the report is issued unless otherwise specified. All electronic data is archived on retrievable media and hard copy reports are stored in data folders maintained by Oxygen. Hardcopy data is stored for a minimum of five years. The client will be notified 30 days prior to the disposal of hardcopy data.

7 Attachments

- 7.1 Attachment A: Chain of Custody
- 7.2 Attachment B: Analytical Results
- 7.3 Attachment C: Raw Analytical Data

8. Signatures



Karen Risha, Principal Investigator

10/04/05

Date



John M. Flaherty, Vice President

10/4/05

Date

A

TAC EPA 00

000426

Login

Login Group: L0006042

Login #: 6153
 Project: P0001749
 Company Name: TACONIC
 Submitted By: Andrew Kawczak
 Login Type: Immediate Receipt of Samples
 Started: True
 Date Start: 09/01/2005
 Due Date: 09/11/2005
 Received Date: 08/27/2005
 Received By: Ammerman, Mark
 Spread Sample:
 Label:
 Exxygen SD/PI: Risha, Karen
 Project Title/Type: Analysis of Fluorochemicals in Samples by LCMSMS / ROUTINE
 Login Notes:

Packages / Containers

<u>Package</u>	<u>Carton</u>	<u>Date / Condition</u>		<u>Shipper / ID</u>	<u>Temp. Control/Temp.</u>	<u>Direction / Handled By</u>
PK0007064		Received Date: 8/27/05 22:00 Package & Contents Uncompromised		UPS 1Z1207904443560405	Wet Ice 0.4	RECEIVED Ammerman, Mark
Container #	Gross Weight	pH	Container Type	Preservative	Mfg. Lot	Mfg. ID
C0090931	612.80 g		500 ml Clear Plastic Narrow	NONE		
C0090932	618.50 g		500 ml Clear Plastic Narrow	NONE		
C0090933	620.60 g		500 ml Clear Plastic Narrow	NONE		
C0090934	614.80 g		500 ml Clear Plastic Narrow	NONE		
C0090935	644.60 g		500 ml Clear Plastic Narrow	NONE		
C0090936	610.60 g		500 ml Clear Plastic Narrow	NONE		
C0090937	682.10 g		500 ml Clear Plastic Narrow	NONE		
C0090938	610.40 g		500 ml Clear Plastic Narrow	NONE		
C0090939	614.00 g		500 ml Clear Plastic Narrow	NONE		
C0090940	517.10 g		500 ml Clear Plastic Narrow	NONE		
C0090941	611.60 g		500 ml Clear Plastic Narrow	NONE		

Login

Samples

<u>Sample ID</u>	<u>Container</u>	<u>Matrix</u>	<u>Fraction</u>	<u>Sample</u>	<u>Date Sampled</u>	<u>Date Due</u>
L0006042-0001	C0090931	LIQUID	Liquid	MW-1	08/26/2005	09/11/2005
L0006042-0002	C0090932	LIQUID	Liquid	MW-2	08/26/2005	09/11/2005
L0006042-0003	C0090933	LIQUID	Liquid	MW-3	08/26/2005	09/11/2005
L0006042-0004	C0090934	LIQUID	Liquid	MW-4	08/26/2005	09/11/2005
L0006042-0005	C0090935	LIQUID	Liquid	FE5	08/26/2005	09/11/2005
L0006042-0006	C0090936	LIQUID	Liquid	RES-SW-1	08/26/2005	09/11/2005
L0006042-0007	C0090937	SOLID	Solid	SS-1	08/26/2005	09/11/2005
L0006042-0008	C0090938	LIQUID	Liquid	CG-DW-1	08/26/2005	09/11/2005
L0006042-0009	C0090939	LIQUID	Liquid	46CB	08/26/2005	09/11/2005
L0006042-0010	C0090940	LIQUID	Liquid	85CB	08/25/2005	09/11/2005
L0006042-0011	C0090941	LIQUID	Liquid	66CB	08/26/2005	09/11/2005

Login Reviewed By:

Date/Time:

9/1/05 1700



CHAIN OF CUSTODY/ANALYSIS REQUEST FORM

Exygen Research Sample Receiving • 3048 Research Drive • State College, PA 16801, USA
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PROJECT INFORMATION

Client (name & address):

ANDREW KAWCZAK / TACONIC
136 COON BROOK RD
PIERSburgh, NY 12138

Phone: 518 658 3202

Fax: 518 658 3204

Sampler: J. E. Kernal (CMA) / ANDREW KAWCZAK

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form completely to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

ExyLIMS#	Client Sample Identification	Collection Date	Collection Time	Grab	Composite	Number of Containers	Specify Matrix	Comments	
MW-1		8/26	9:45A	X		1	G.WATER	LOOKING for PFOS/APFO	
MW-2			10:15A	X		1	G.WATER		
MW-3			10:45A	X		1	G.WATER		
MW-4			11:10A	X		1	G.WATER		
FE5			10:30A	X		1	Wastewater		
RES-SW-1			1:10P	X		1	S.water		
SS-1			1:35P	X		1	WET Soils		
CG-DW-			12:40P	X		1	G.WATER		

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
Andy KAWCZAK	8/26/05	2:50 PM

Cooler ID # CK00002 Cooler Temp. (°C) 0.4

Received by	Date	Time
	8/27/05	2:20 PM

LAB USE ONLY

OTHER INFORMATION

Please give me a call w/ results

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
- Add case narrative
- Add quality control summary
- Add calibration summary
- Add raw data
- Other _____

TAC EPA 00438

000429



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PROJECT INFORMATION

Client (name & address):

ANDREW KAWCZAK / TAONIC
136 COON BROOK RD

Phone: F18-1583 3282

Fax: 518 1544 3284

Sampler: 9-5, Merrill (CHB) / A Youngell - TA

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form completely to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
<u>Andy KAWCZAK</u>	8/26/05	2:50 PM

Cooler ID # C10000324 Cooler Temp. (°C) 014

Received by	Date	Time
<i>JLH</i>	8/23/05	2200

LAB USE ONLY

OTHER INFORMATION

Please Give me a call w/ results

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
 - Add case narrative
 - Add quality control summary
 - Add calibration summary
 - Add raw data
 - Other

TAC EPA 00439
REF 604

000430



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ANDREW KAWCZAK / TACONIC
136 Coon Brook Rd
PETERSburgh, NY 12138

Phone: 518 658 3202

Fax: 518 658 3204

Sampler: J.E. Kernal (CMA) / ADKawczak Taconic

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form completely to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

ExyLIMS#	Client Sample Identification	Collection Date	Collection Time	Grab	Composite	Number of Containers	Specify Matrix	Comments	
MW-1		8/26	9:45A	X		1	G.WATER	Looking for PFOS/APFO	
MW-2			10:15A	X		1	G.WATER		
MW-3			10:45A	X		1	G.WATER		
MW-4			11:10A	X		1	G.WATER		
FE5			10:30A	X		1	Wastewater		
RES-SW-1			1:10P	X		1	S.water		
SS-1			1:35P	X		1	WET soils		
(G-DW-1)			12:40P	X		1	G.WATER		

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
Andy KAWCZAK	8/26/05	2:50 PM

Cooler ID # CR000021 Cooler Temp. (°C) 0.4

Received by	Date	Time
<i>[Signature]</i>	8/27/05	2:30P

LAB USE ONLY

OTHER INFORMATION

Please give me a call w/ results

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
- Add case narrative
- Add quality control summary
- Add calibration summary
- Add raw data
- Other _____

TAC/EPA 00440

000431



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Client (name & address):

ANDREW KAWCZAK / TACONIC
136 COON BROOK RD
PETERSBURGH, NEW YORK 12138

Phone: 518 658 3202

Fax: 518 658 3204

Sampler: J. S. David (CHA) / Vonnegut - Tacon Quotation #: _____

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form completely to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

JAR USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
<u>Andy KAWCZAK</u>	8/26/05	2:50 PM

Received by	Date	Time
<u>John</u>	8/21/05	2:00pm

LAB USE ONLY

OTHER INFORMATION

Please Give me a call w/ results

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
 - Add case narrative
 - Add quality control summary
 - Add calibration summary
 - Add raw data
 - Other

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000432



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Client (name & address):

ANDREW KAWICZAK / TACONIC
136 Creek Brook Rd
PATERBURGH, NY 12138
Phone: 518 650 3202
Fax: 518 650 3204
Sampler: A.E. KAWICZAK (CHA) ADY ANALYST TACONIC

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form *completely* to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

ExyLIMS#	Client Sample Identification	Collection Date	Collection Time	Grab	Composite	Number of Containers	Specify Matrix	Comments
MW-1		8/26	9:15A	X		1	G.WATER	LOOKING FOR PFOS/APFO
MW-2			10:15A	X		1	G.WATER	
MW-3			10:45A	X		1	G.WATER	
MW-4			11:10A	X		1	G.WATER	
ES-5			10:30A	X		1	Wastewater	
RSS-SW-1			1:10P	X		1	S.Water	
SS-1		↓	1:35P	X		1	Wet Soils	↓
(G-DW-1)		↓	1:40P	X		1	G.Water	

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
ANDREW KAWICZAK	8/26/05	2:50 PM

Cooler ID # _____

Cooler Temp. (°C) _____

Received by	Date	Time

LAB USE ONLY

OTHER INFORMATION

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
- Add case narrative
- Add quality control summary
- Add calibration summary
- Add raw data
- Other _____

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PROJECT INFORMATION

Client (name & address):

ANDREW KAWCZAK / TACONIC
13 E COON BROOK RD
POTTERSBURGH, NEW YORK 12138

Phone: 518 658 3702

Fax: 518 154 32-04

Sampler: A.S. Moncillo (CHA) / D. Varnell - TA

Project Manager (Name & E-mail Address):

Project Name:

P.O. #:

Quotation #:

Please fill out this form *completely* to ensure correct analysis and proper handling of your samples.

ANALYSES REQUESTED

SAMPLE ANALYSIS

LAB USE ONLY

CHAIN OF CUSTODY

Relinquished by	Date	Time
Andy KAWCZAK	8/21/05	2:50 PM

Cooler ID # _____ Cooler Temp. (°C) _____

Received by	Date	Time
--------------------	-------------	-------------

LAB USE ONLY

OTHER INFORMATION

PROJECT REQUIREMENTS

Results Deadline:

Laboratory Report Options:

- Sample results only
 - Add case narrative
 - Add quality control summary
 - Add calibration summary
 - Add raw data
 - Other

TAC EPA 00443

000434



3058 Research Drive Phone: 814-272-1039
State College, PA 16801 Fax: 814-231-1580

TEMPORARY SAMPLE STORAGE FORM

To be completed during ExyLIMS Login

Project #: P1749

Login #: L6042

Initials / Date: MA 09/01/15

One form to be completed for each package

Date / Time Received: 8/27/2015 2200

Received By: Susan Cullen

Shipper: UPS

Shipper Package ID: 121207904443560400

Temperature (deg C) / Thermometer ID: 00001775 0.4

Temperature Control Method: wt Ice

Temporary Storage Location: Cooler 3

Condition of sample(s):

- Good – Package and contents uncompromised
 Fair – Package damaged / contents uncompromised
 Poor – Package and contents compromised

Notes:



TAC EPA 00445

000436

B

TAC EPA 00

000437

RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	0.2 ng/mL	Set No:	091905A
Oxygen Study No:	L6042	Injection Volume:	15 μ L	Analyst:	Karen Risha
Analyte:	C8 Acid (PFOA)	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	415 > 369	Sample Volume:	NA	Extraction Date:	NA
Site:	NA	Final Volume:	NA	Analyzed on:	09/19/2005

Oxygen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ng/mL)	Dilution Factor	Peak Area	Analyte Found (ng/mL)	Amount Added (ng/mL)	Recovery (%)
0.2 ng/mL Standard	-	CS	091905A-601	0.2	-	19511	-	-	-
0.5 ng/mL Standard	-	CS	091905A-602	0.5	-	39165	-	-	-
1.0 ng/mL Standard	-	CS	091905A-603	1.0	-	74666	-	-	-
5 ng/mL Standard	-	CS	091905A-604	5.0	-	353578	-	-	-
10 ng/mL Standard	-	CS	091905A-605	10.0	-	647666	-	-	-
50 ng/mL Standard	-	CS	091905A-606	50.0	-	2990637	-	-	-
Methanol Wash	-	C	091905A-607	-	-	0	-	-	-
L6042-1	MW-1	S	091905A-608	-	10000	62608	8818	-	-
L6042-2	MW-2	S	091905A-609	-	10000	6514	**	-	-
L6042-3	MW-3	S	091905A-610	-	1000	5440	**	-	-
L6042-4	MW-4	S	091905A-611	-	100	13227	**	-	-
L6042-5	FES	S	091905A-612	-	1000000	8646553	^	-	-
L6042-5	FES	S	091905A-613	-	100000	10227170	*	-	-
Methanol Wash	-	C	091905A-614	-	-	2028	-	-	-
0.2 ng/mL Standard	-	CS	091905A-615	0.2	-	17657	-	-	-
0.5 ng/mL Standard	-	CS	091905A-616	0.5	-	39318	-	-	-
L6042-6	RES-SW-1	S	091905A-617	-	100	1191	**	-	-
L6042-6	RES-SW-1	S	091905A-618	-	10	5752	**	-	-
L6042-7	SS-1	S	091905A-619	-	100	0	**	-	-
L6042-8	CG-DW-1	S	091905A-620	-	100	0	**	-	-
L6042-8	CG-DW-1	S	091905A-621	-	10	6175	**	-	-
1.0 ng/mL Standard	-	CS	091905A-622	1.0	-	71369	-	-	-
5 ng/mL Standard	-	CS	091905A-623	5.0	-	340079	-	-	-
L6042-9	46CB	S	091905A-624	-	100	0	**	-	-
L6042-9	46CB	S	091905A-625	-	10	1298	**	-	-
L6042-10	85CB	S	091905A-626	-	100	0	**	-	-
L6042-10	85CB	S	091905A-627	-	10	4433	**	-	-
L6042-11	66CB	S	091905A-628	-	10	0	*	-	-
L6042-11	66CB	S	091905A-629	-	1	5222	ND	-	-
10 ng/mL Standard	-	CS	091905A-630	10.0	-	664259	-	-	-
50 ng/mL Standard	-	CS	091905A-631	50.0	-	2994893	-	-	-

Analyte Found (ng/mL) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ng/mL)} - \text{analyte found in control (ng/mL)}]}{\text{amount added (ng/mL)}} \times 100$

Standard Curve : Linear (1/x weighted)

Intercept = 8746.22

Slope = 61078.3

Coef. Of Det. = 0.998889

CS = Calibration standard

LF = Lab fortified sample

C = Control sample

FF = Field fortified sample

S = Sample

LCS = Laboratory Control Spike

ND = Not detected = Response between 0 and 200 ng/mL.

*Sample was analyzed at several dilution levels in this set. The appropriate result is reported

**Sample was over-diluted. See data set 091905AR.

^Sample requires further dilution. See data set 091905AR.

Spreadsheet prepared by: KR, 09/20/05

PF 09/19/05

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/mL)	Conc B	Conc C	Test ID	DF	MS Method
1	1	091905A-601	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	---	0	1	PFOA 12 MIN
2	2	091905A-602	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	---	0	1	PFOA 12 MIN
3	3	091905A-603	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	---	0	1	PFOA 12 MIN
4	4	091905A-604	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	---	0	1	PFOA 12 MIN
5	5	091905A-605	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	---	0	1	PFOA 12 MIN
6	6	091905A-606	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	---	0	1	PFOA 12 MIN
7	92	091905A-607	---	Methanol Wash	---	Blank	---	---	---	0	1	PFOA 12 MIN
8	41	091905A-608	---	L6042-1, DF=10000	---	Analyte	---	---	---	0	1	PFOA 12 MIN
9	42	091905A-609	---	L6042-2, DF=10000	---	Analyte	---	---	---	0	1	PFOA 12 MIN
10	43	091905A-610	---	L6042-3, DF=1000	---	Analyte	---	---	---	0	1	PFOA 12 MIN
11	44	091905A-611	---	L6042-4, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
12	45	091905A-612	---	L6042-5, DF=1000000	---	Analyte	---	---	---	0	1	PFOA 12 MIN
13	46	091905A-613	---	L6042-5, DF=100000	---	Analyte	---	---	---	0	1	PFOA 12 MIN
14	92	091905A-614	---	Methanol Wash	---	Blank	---	---	---	0	1	PFOA 12 MIN
15	1	091905A-615	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	---	0	1	PFOA 12 MIN
16	2	091905A-616	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	---	0	1	PFOA 12 MIN
17	47	091905A-617	---	L6042-6, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
18	48	091905A-618	---	L6042-6, DF=10	---	Analyte	---	---	---	0	1	PFOA 12 MIN
19	49	091905A-619	---	L6042-7, 1g, 10 mL, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
20	50	091905A-620	---	L6042-8, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
21	33	091905A-621	---	L6042-8, DF=10	---	Analyte	---	---	---	0	1	PFOA 12 MIN
22	3	091905A-622	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	---	0	1	PFOA 12 MIN
23	4	091905A-623	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	---	0	1	PFOA 12 MIN
24	34	091905A-624	---	L6042-9, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
25	35	091905A-625	---	L6042-9, DF=10	---	Analyte	---	---	---	0	1	PFOA 12 MIN
26	36	091905A-626	---	L6042-10, DF=100	---	Analyte	---	---	---	0	1	PFOA 12 MIN
27	37	091905A-627	---	L6042-10, DF=10	---	Analyte	---	---	---	0	1	PFOA 12 MIN
28	38	091905A-628	---	L6042-11, DF=10	---	Analyte	---	---	---	0	1	PFOA 12 MIN
29	39	091905A-629	---	L6042-11	---	Analyte	---	---	---	0	1	PFOA 12 MIN
30	5	091905A-630	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	---	0	1	PFOA 12 MIN
31	6	091905A-631	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	---	0	1	PFOA 12 MIN

BS 09/19/05**HPLC Method MS Tune File Inj. Volume**

1	pfbS water	Fluorochems	15
2	pfbS water	Fluorochems	15
3	pfbS water	Fluorochems	15
4	pfbS water	Fluorochems	15
5	pfbS water	Fluorochems	15
6	pfbS water	Fluorochems	15
7	pfbS water	Fluorochems	15
8	pfbS water	Fluorochems	15
9	pfbS water	Fluorochems	15
10	pfbS water	Fluorochems	15
11	pfbS water	Fluorochems	15
12	pfbS water	Fluorochems	15
13	pfbS water	Fluorochems	15
14	pfbS water	Fluorochems	15
15	pfbS water	Fluorochems	15
16	pfbS water	Fluorochems	15
17	pfbS water	Fluorochems	15
18	pfbS water	Fluorochems	15
19	pfbS water	Fluorochems	15
20	pfbS water	Fluorochems	15
21	pfbS water	Fluorochems	15
22	pfbS water	Fluorochems	15
23	pfbS water	Fluorochems	15
24	pfbS water	Fluorochems	15
25	pfbS water	Fluorochems	15
26	pfbS water	Fluorochems	15
27	pfbS water	Fluorochems	15
28	pfbS water	Fluorochems	15
29	pfbS water	Fluorochems	15
30	pfbS water	Fluorochems	15
31	pfbS water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exxygen Study No: L6042

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exxygen ID: MA0019403
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A) : 2 mM Ammonium Acetate in Water
Mobile Phase (B) : Methanol

Analyst: Karen Risha
Exxygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

*Karen Risha
9/19/05*

**NOTE: The next 3 pages are computer generated printouts from
the masslynx software program. The pages contain the
instrument settings used for the analysis of this data set.**

All Handwritten Peak ID's by:

*Karen Risha
9/20/05*

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\PFOA 12 MIN
Last Modified: Wed Apr 13 15:44:53 2005

Printed: Mon Sep 19 13:28:05 2005

2009/09/05

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused
Function : 1 MRM of 1 Mass Pair (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1	413.00	369.00	0.20	10	10

Method Report

Page 1

Method File:**Last Modified:**c:\masslynx\fluorochemicals.pro\acqudb\pfbs water
Monday, September 19, 2005 13:21:25**Printed:**

Monday, September 19, 2005 13:28:09

bf09/19/05

HP1100 LC Pump Initial Conditions**Solvents**

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left(°C)	30.0
Oven Temperature Right(°C)	30.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.00
Stop Time (mins)	20.00
Injection Volume(μl)	15.0
Vial Number	4

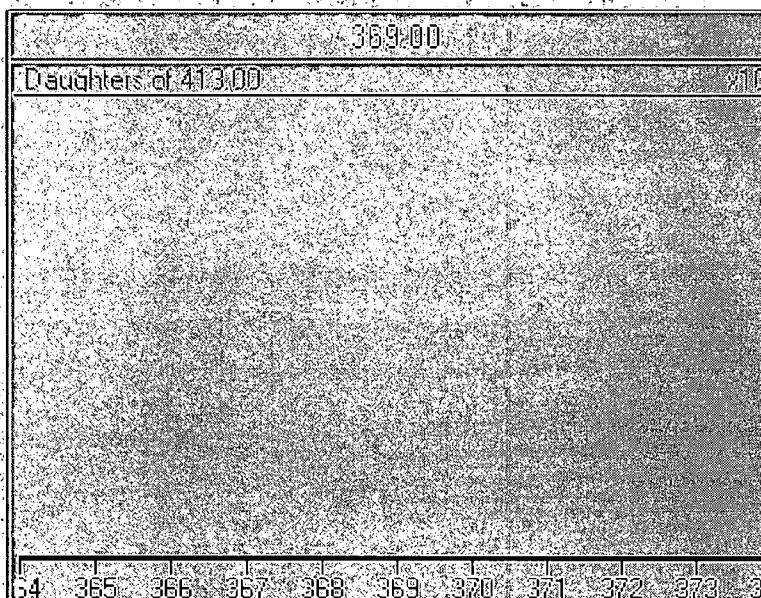
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\FLUOROCHEMS

Printed: Mon Sep 19 13:28:20 2005

bf919105



Dau 413.00

SOURCE (ESP ⁻)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	+2.93	LM Res 1	13.5	
Cone	10	-10	HM Res 1	13.5	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	8
Hexapole 2	0.0		Collision	30	9
Source Block Temp.	100	99	Exit	2	11
Desolvation Temp.	300	299	LM Res 2	13.5	
			HM Res 2	13.5	
			IEnergy 2	2.0	
			Multiplier	650	-648
Pressures		Rdbk	Gas Flows		Rdbk
Analyser Vacuum		OFF	Cone Gas		186.0
Gas Cell		3.4e-3	Desolvation		782.1

Quantify Calibration Report

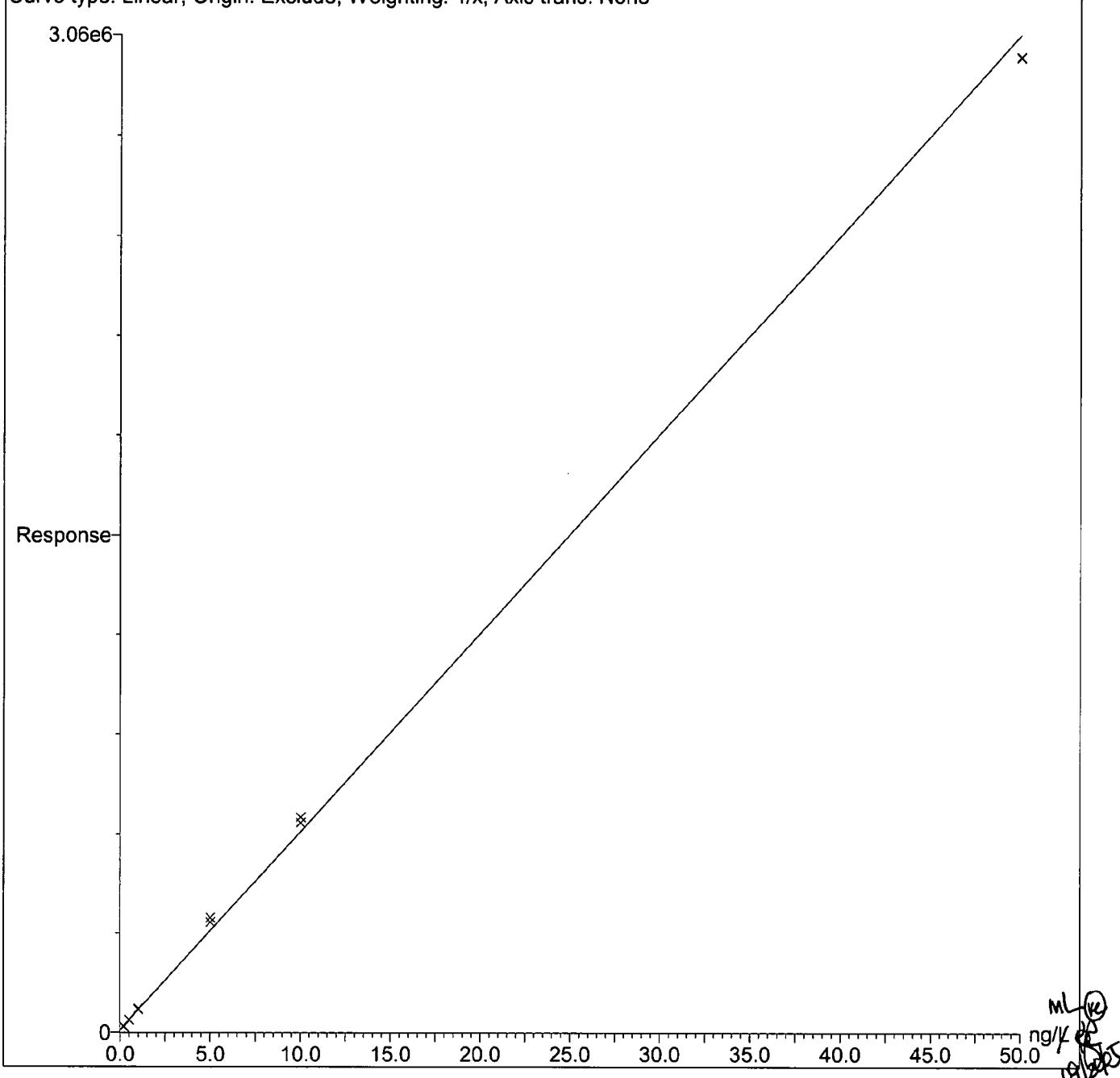
Page 1

Study No.: L6042, Set No.: 090605A, Ext.Date: NA, Analyst: K.Risha

Calibration: P:\Data\LCMSMS\Masslynx\Fluorochemicals.PRO\CurveDB\091905A Taconic Water
Last modified: Tue Sep 20 06:18:04 2005
Printed: Tue Sep 20 06:20:52 2005

kg 09/20/05

Compound 1 name: C8 Acid
Coefficient of Determination: 0.998889
Calibration curve: $61078.3 * x + 8746.22$
Response type: External Std, Area
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Oxygen Research, 3058 Research Drive, State College, PA 16801

TAC EPA 00454

000445

Summary of PFOA in Water and Soil Samples

Sample ID	Analyte Found ppb (ng/mL)
	PFOA
MW-1	8820
MW-2	703
MW-3	61.8
MW-4	15.6
MW-4**	12.4
FE5	172000000
RES-SW-1	0.584
SS-1*	4.71 ng/g
CG-DW-1	0.691
46CB	ND
46CB*	ND
85CB	0.349
66CB	ND

ND = Not Detected. Result is less than 0.2 ng/mL.

*Soil Sample. Results are reported in ng/g, wet weight.

**Laboratory Duplicate

X 3058 Research Drive
State College, PA 16801, USA

T: 814.272.1039
F: 814.231.1580
oxygen.com

TAC EPA 00455

000446

Quantify Sample Report

Page 1

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Wat

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFQA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Initials

Date 09/20/05

Run# 090605A-601 To 091905A-631

Name: 091905A-601

Text:

1: C8 Acid

C033105-6, 0.2 ng/mL Standard

19-Sep-2005 17:12:49

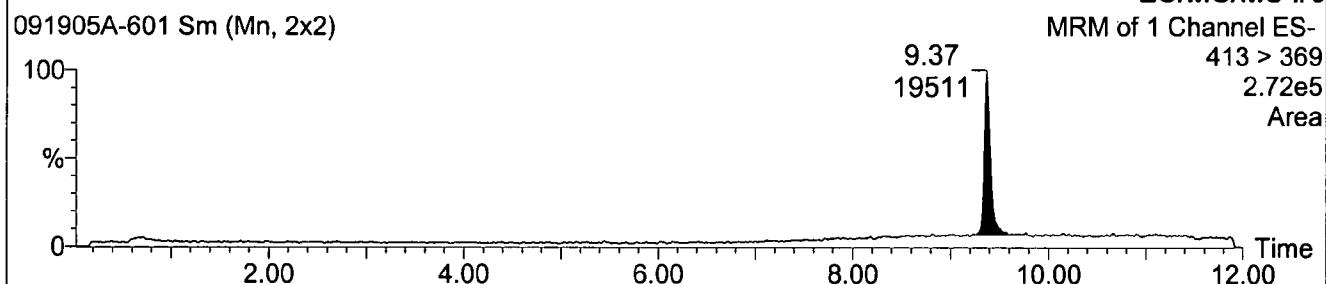
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

2.72e5

Area





Precise Research.
Proven Results.

Recovery Summary for PFOA in Water Samples

Sample Description	Amount Spiked (ng/mL)	PFOA		
		Amt Found in Sample (ng/mL)	Amount Recovered (ng/mL)	Recovery (%)
MW-4 10 ng/mL Spike	10	15.6	23.6	80
46CB 10 ng/mL Spike	10	ND	10.5	105

ND = Not Detected. Result is less than 0.2 ng/mL.

X 3058 Research Drive
State College, PA 16801, USA

T: 800.281.3219
F: 814.272.1019
exygen.com

TAC EPA 00457

000448

Quantify Sample Report

Page 2

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-602

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

19-Sep-2005 17:34:24

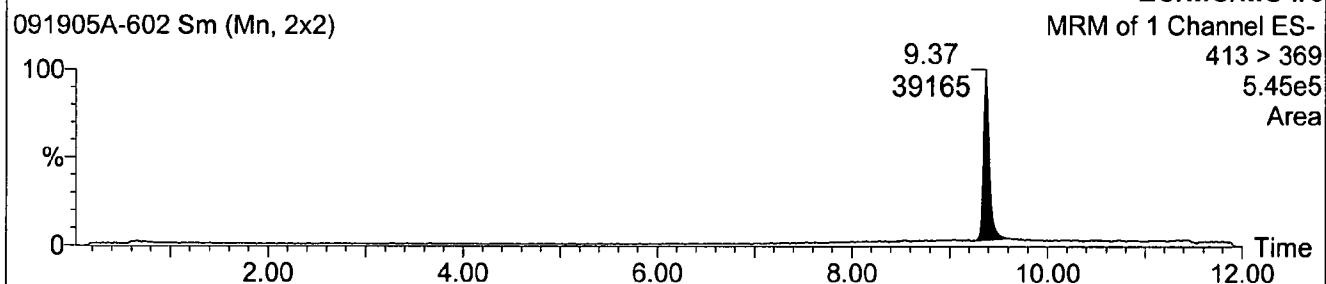
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

5.45e5

Area



Quantify Sample Report

Page 3

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-603

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

19-Sep-2005 17:55:58

LC/MS/MS #6

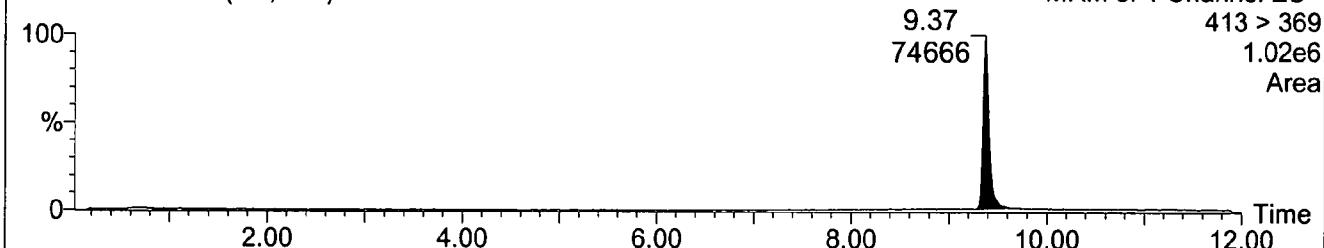
091905A-603 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.02e6

Area



Quantify Sample Report

Page 4

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-604

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

19-Sep-2005 18:17:44

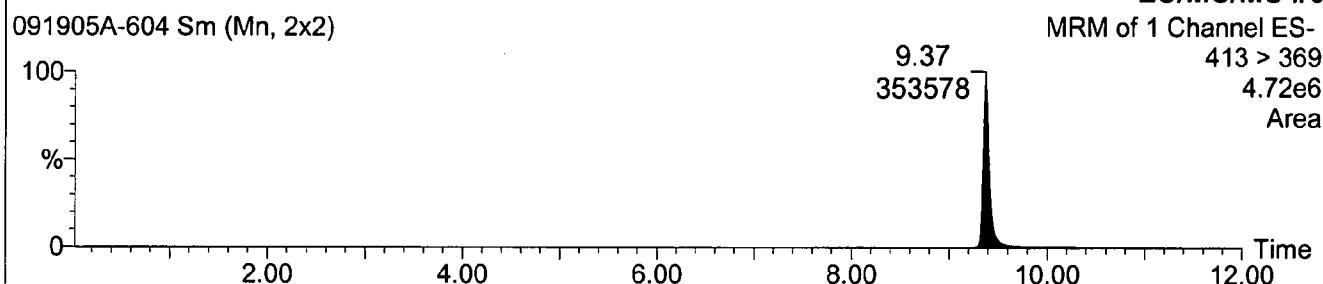
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

4.72e6

Area



Quantify Sample Report

Page 5

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-605

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

19-Sep-2005 18:39:23

LC/MS/MS #6

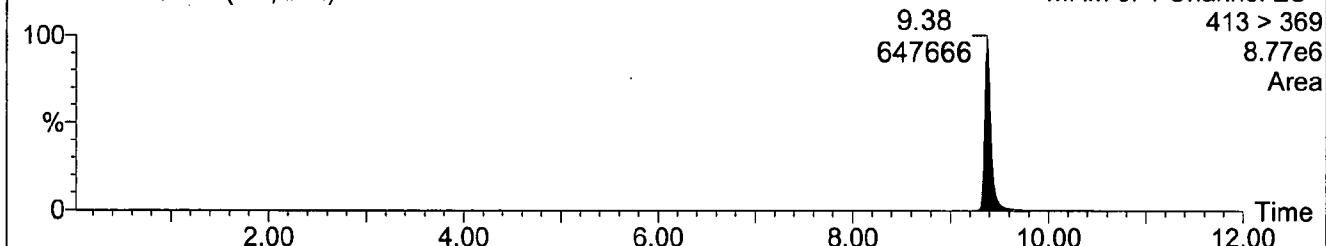
091905A-605 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

8.77e6

Area



Quantify Sample Report

Page 6

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-606

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

19-Sep-2005 19:01:10

LC/MS/MS #6

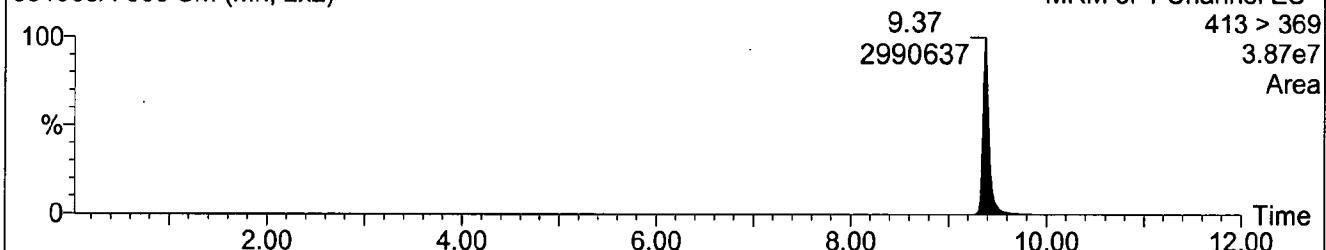
091905A-606 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

3.87e7

Area



Quantify Sample Report

Page 7

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

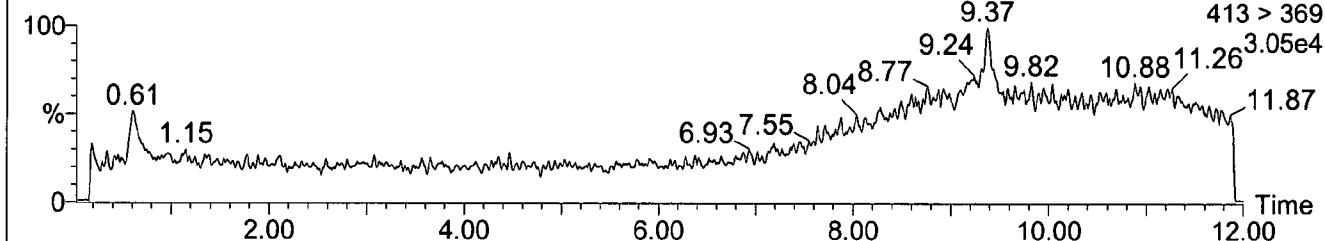
Name: 091905A-607

Text:

1: C8 Acid

Methanol Wash

091905A-607 Sm (Mn, 2x2)



Quantify Sample Report

Page 8

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

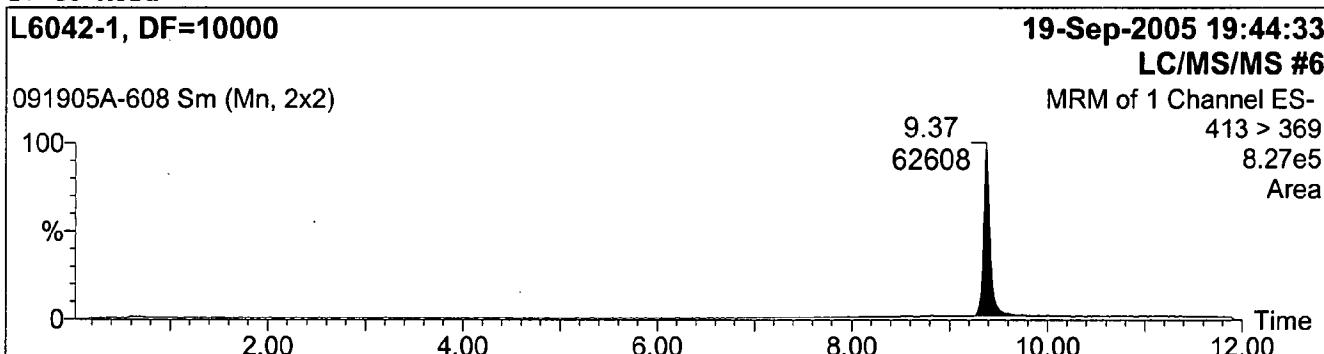
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-608

Text:

1: C8 Acid



Quantify Sample Report

Page 9

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

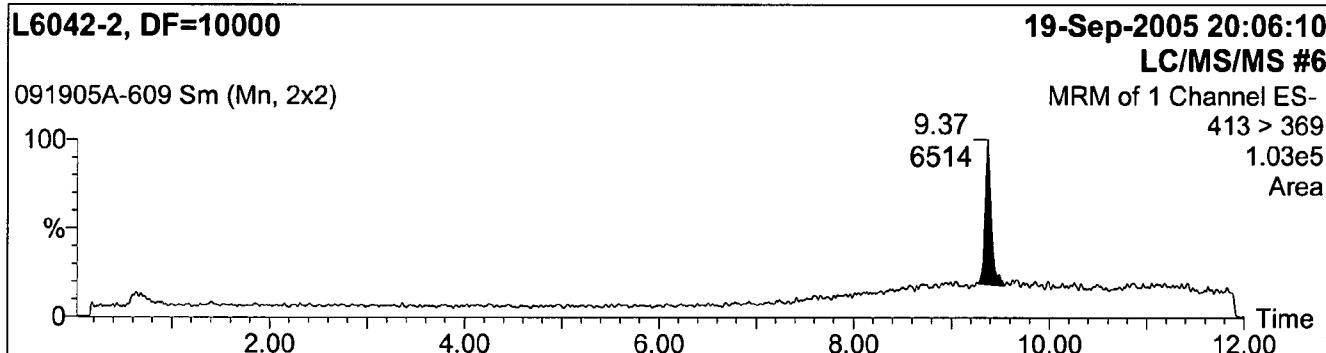
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-609

Text:

1: C8 Acid



Quantify Sample Report

Page 10

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-610

Text:

1: C8 Acid

L6042-3, DF=1000

19-Sep-2005 20:27:53

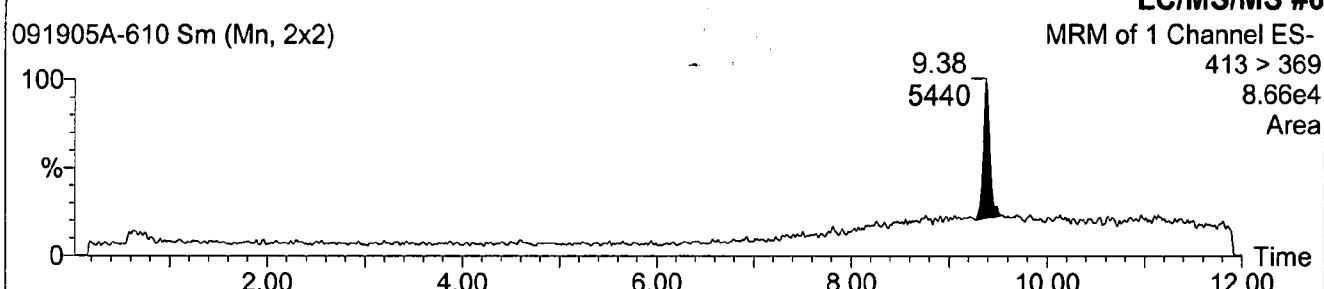
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

8.66e4

Area



Quantify Sample Report

Page 11

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-611

Text:

1: C8 Acid

L6042-4, DF=100

19-Sep-2005 20:49:32

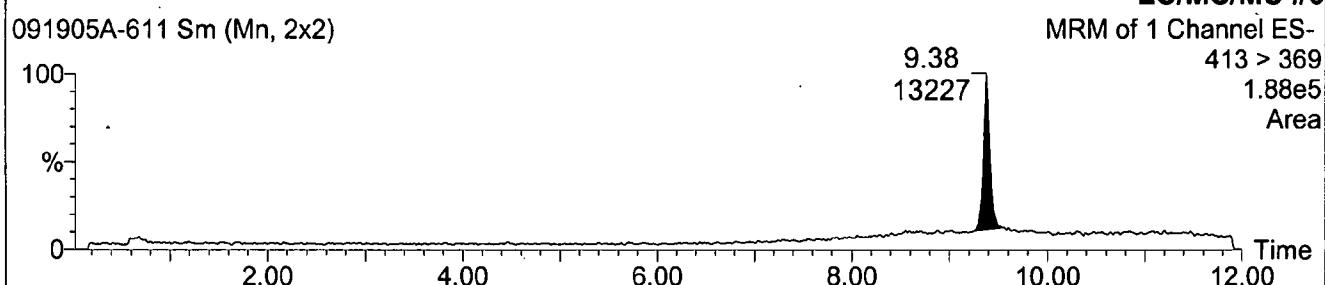
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

1.88e5

Area



Quantify Sample Report

Page 12

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

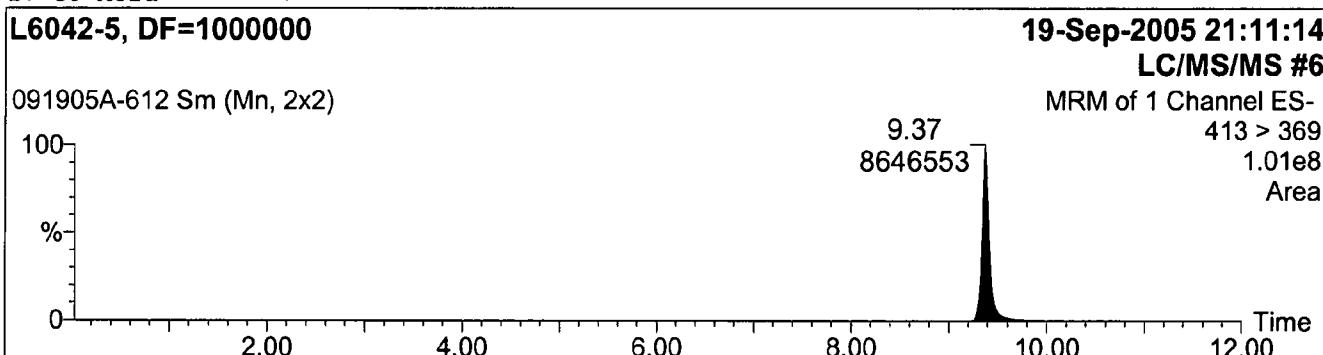
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-612

Text:

1: C8 Acid



Quantify Sample Report

Page 13

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-613

Text:

1: C8 Acid

L6042-5, DF=100000

19-Sep-2005 21:32:58

LC/MS/MS #6

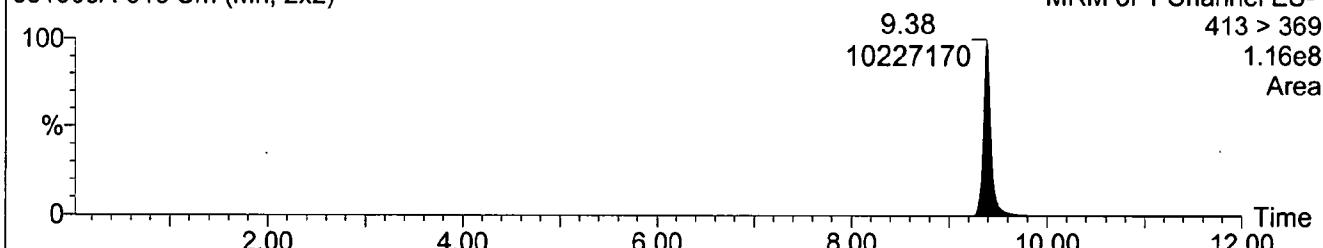
091905A-613 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.16e8

Area



Quantify Sample Report

Page 14

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-614

Text:

1: C8 Acid

Methanol Wash

19-Sep-2005 21:54:44

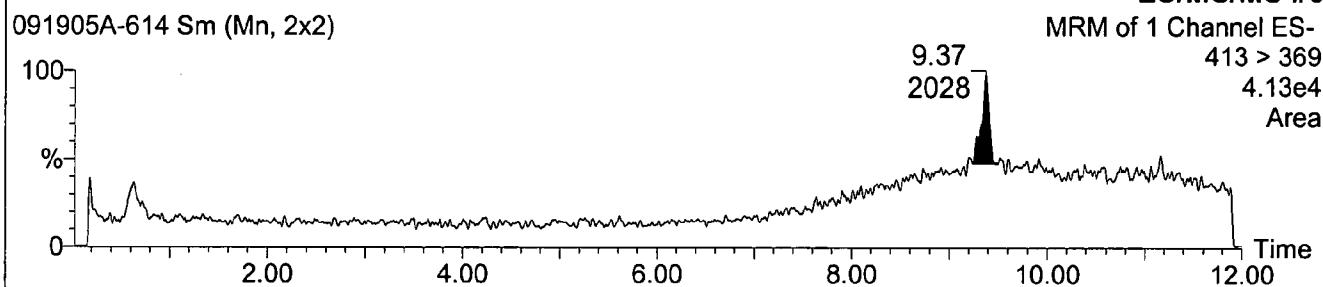
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

4.13e4

Area



Quantify Sample Report

Page 15

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-615

Text:

1: C8 Acid

C033105-6, 0.2 ng/mL Standard

19-Sep-2005 22:16:26

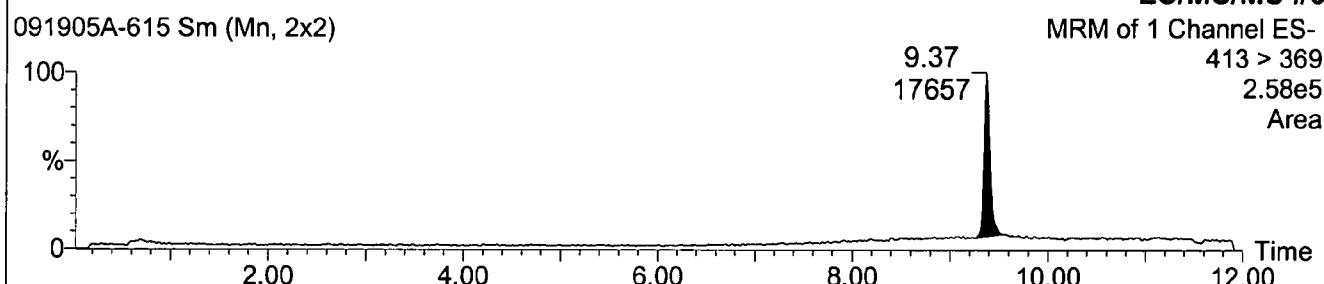
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

2.58e5

Area



Quantify Sample Report

Page 16

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-616

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

19-Sep-2005 22:38:05

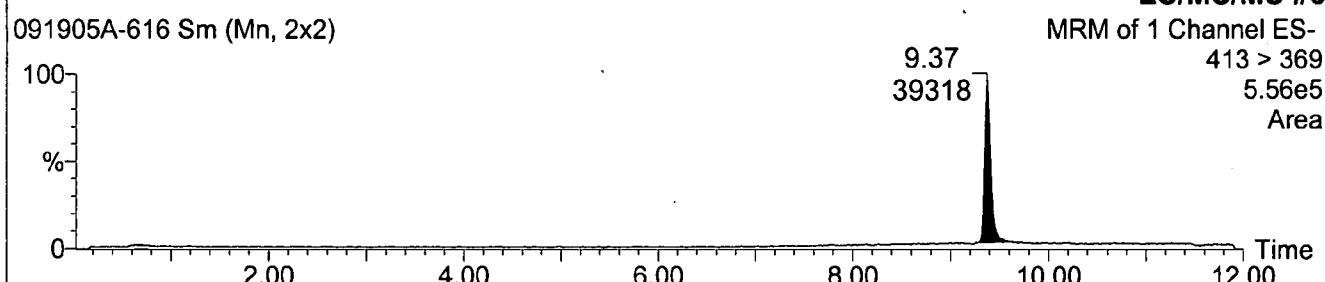
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

5.56e5

Area



Quantify Sample Report

Page 17

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-617

Text:

1: C8 Acid

L6042-6, DF=100

091905A-617 Sm (Mn, 2x2)

100

%

2.00

4.00

6.00

8.00

10.00

12.00

19-Sep-2005 22:59:46

LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

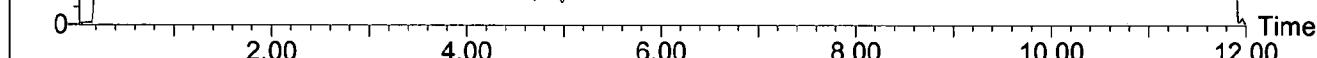
3.02e4

Area

9.37

1191

Time



Quantify Sample Report

Page 18

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-618

Text:

1: C8 Acid

L6042-6, DF=10

19-Sep-2005 23:21:29

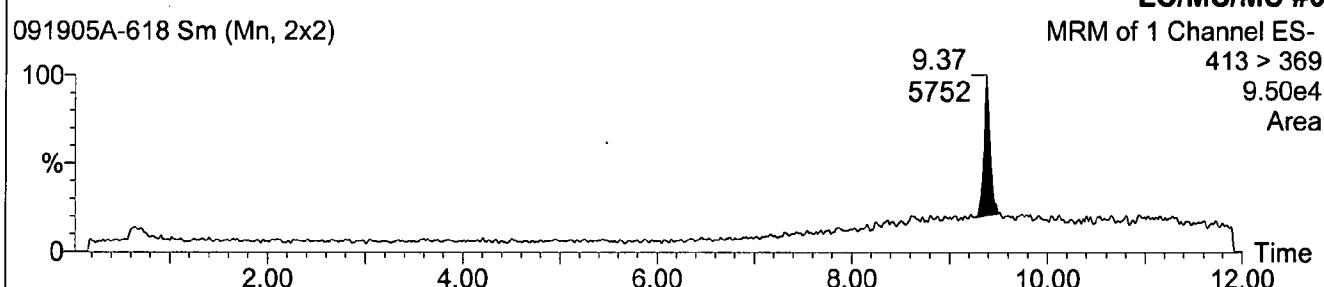
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

9.50e4

Area



Quantify Sample Report

Page 19

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-619

Text:

1: C8 Acid

L6042-7, 1g, 10 mL, DF=100

091905A-619 Sm (Mn, 2x2)

100

0.67 0.82

2.00

4.00

6.00

7.59

8.27

8.89

9.31

9.49

9.96

11.00

11.70

3.06e4

Time

19-Sep-2005 23:43:15
LC/MS/MS #6

MRM of 1 Channel ES-
413 > 369

Quantify Sample Report

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Page 20

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

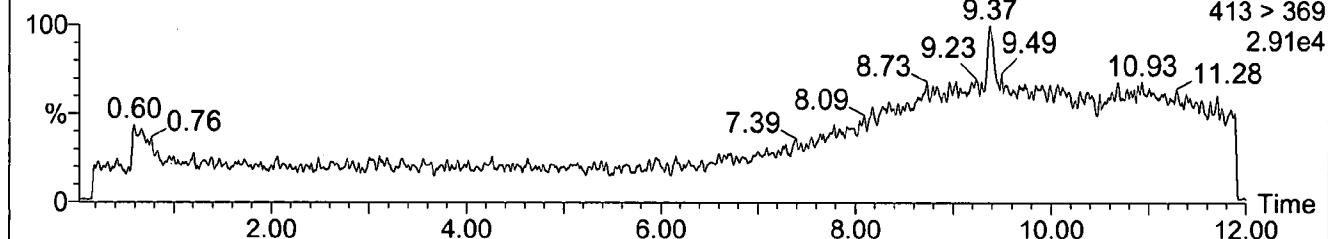
Name: 091905A-620

Text:

1: C8 Acid

L6042-8, DF=100

091905A-620 Sm (Mn, 2x2)



Quantify Sample Report

Page 21

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

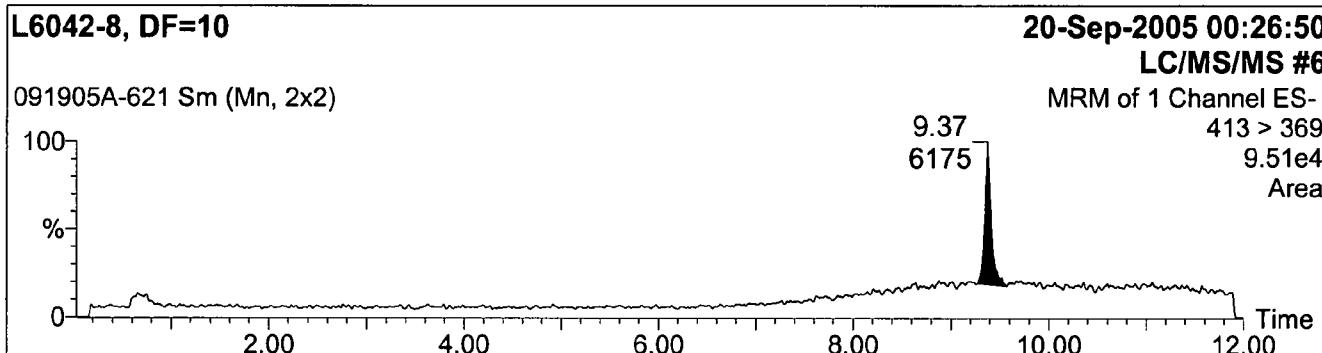
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-621

Text:

1: C8 Acid



Quantify Sample Report

Page 22

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-622

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

20-Sep-2005 00:48:33

LC/MS/MS #6

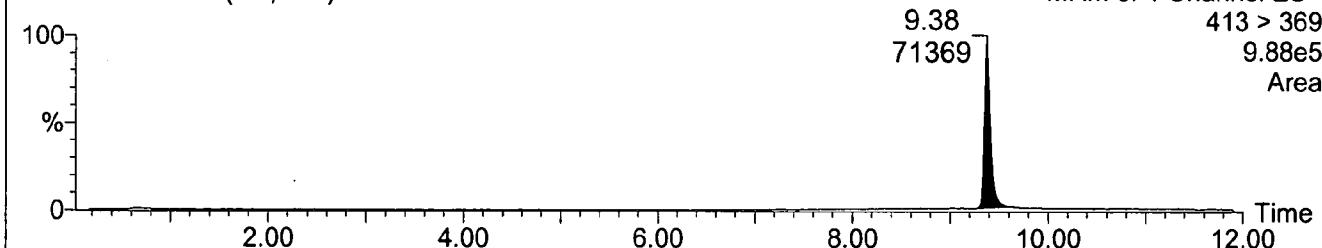
091905A-622 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

9.88e5

Area



Quantify Sample Report

Page 23

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-623

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

20-Sep-2005 01:10:11

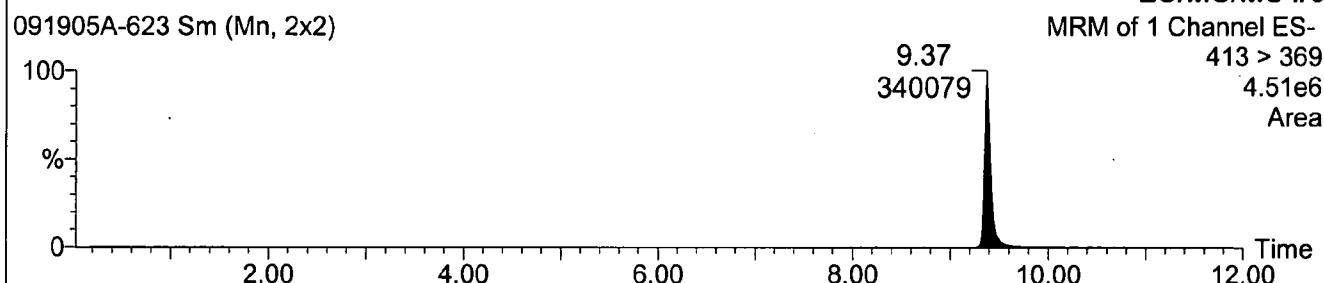
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

4.51e6

Area



Quantify Sample Report

Page 24

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Wat-

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

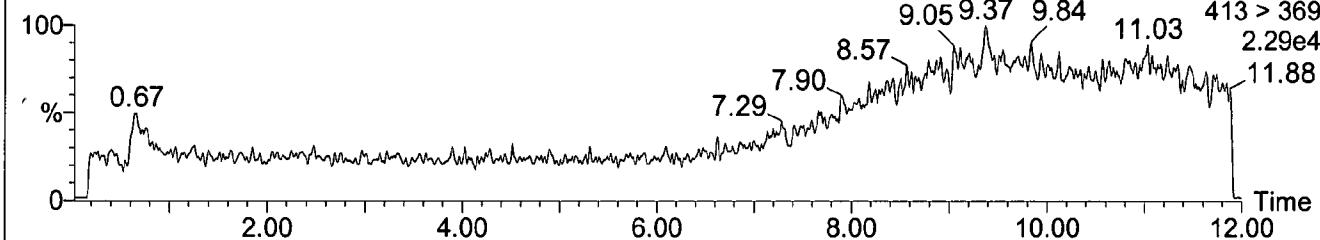
Name: 091905A-624

Text:

1: C8 Acid

L6042-9, DF=100

091905A-624 Sm (Mn, 2x2)



Quantify Sample Report

Page 25

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-625

Text:

1: C8 Acid

L6042-9, DF=10

091905A-625 Sm (Mn, 2x2)

100

%

0

2.00

4.00

6.00

8.00

10.00

12.00

Time

20-Sep-2005 01:53:33
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

3.08e4

Area

9.38

1298

Quantify Sample Report

Page 26

Study No.: L6042, Set No.: 090605A, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

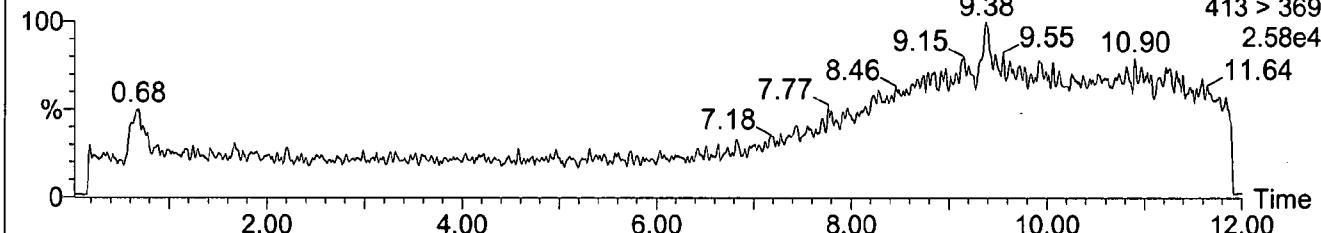
Name: 091905A-626

Text:

1: C8 Acid

L6042-10, DF=100

091905A-626 Sm (Mn, 2x2)



Quantify Sample Report

Page 27

Study No.: L6042, Set No.: 090605A, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-627

Text:

I: C8 Acid

L6042-10, DF=10

20-Sep-2005 02:37:06

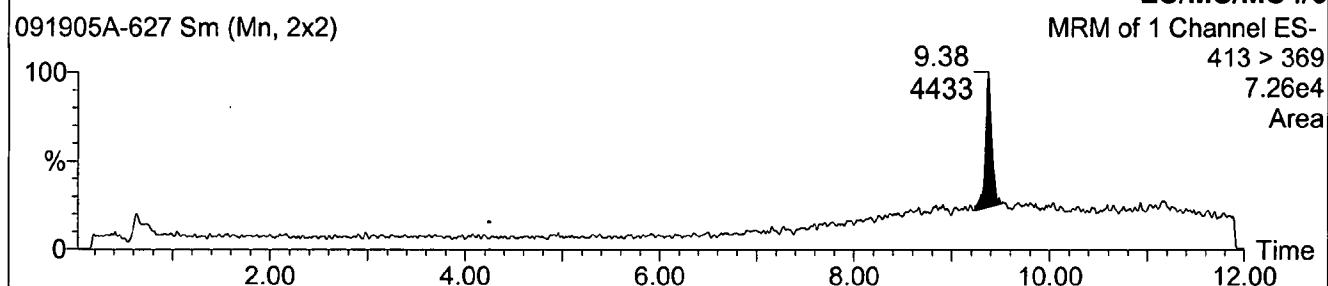
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

7.26e4

Area



Quantify Sample Report

Page 28

Study No.: L6042, Set No.: 090605A, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

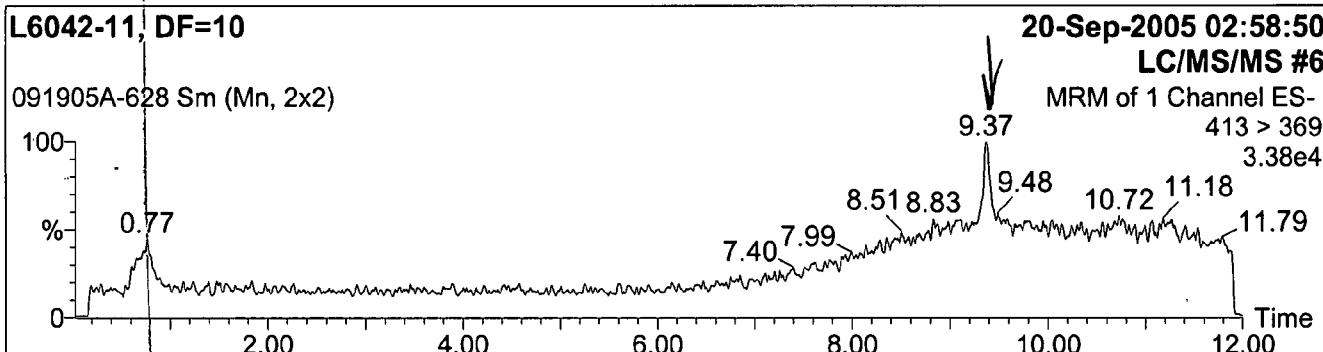
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-628

Text:

1: C8 Acid



Quantify Sample Report

Page 29

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-629

Text:

1: C8 Acid

L6042-11

091905A-629 Sm (Mn, 2x2)

100

%

0

2.00

4.00

6.00

8.00

10.00

12.00

9.37
5222

20-Sep-2005 03:20:36
LC/MS/MS #6

MRM of 1 Channel ES-
413 > 369
8.53e4
Area

Time

Quantify Sample Report
Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Page 30

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water
Last modified: Tue Sep 20 06:14:23 2005
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805
Last modified: Fri Apr 15 09:21:49 2005
Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-630

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

091905A-630 Sm (Mn, 2x2)

100-

%

2.00

4.00

6.00

8.00

10.00

12.00

9.37
664259

20-Sep-2005 03:42:22

LC/MS/MS #6

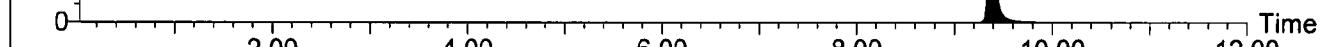
MRM of 1 Channel ES-

413 > 369

8.75e6

Area

Time



Quantify Sample Report

Page 31

Study No.:L6042, Set No.:090605A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905A Taconic Water

Last modified: Tue Sep 20 06:14:23 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Sep 20 06:20:53 2005

Name: 091905A-631

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

20-Sep-2005 04:04:05

LC/MS/MS #6

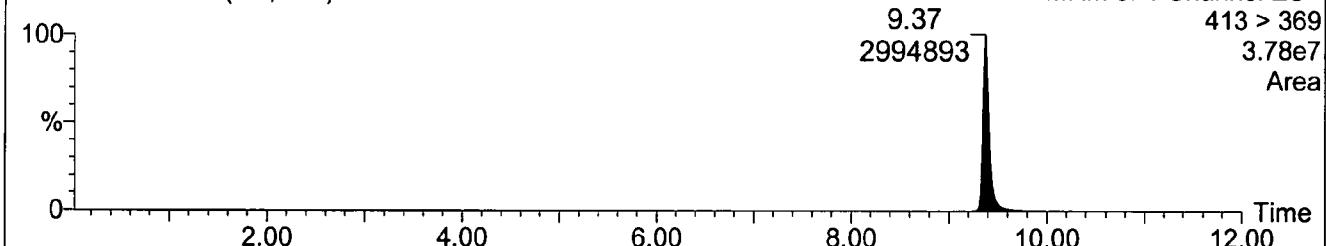
091905A-631 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

3.78e7

Area



RAW DATA REPORT

Sponsor Study No:	NA	Limit of Quantitation:	0.2 ng/mL	Set No:	091905AR
Oxygen Study No:	L6042	Injection Volume:	15 μ L	Analyst:	Karen Risha
Analyte:	C8 Acid (PFOA)	Matrix:	Water	Instrument Type:	LC/MS/MS Unit # 6
Ions Monitored:	415 -> 369	Sample Volume:	NA	Extraction Date:	NA
Site:	NA	Final Volume:	NA	Analyzed on:	09/21/05

Oxygen ID	Sponsor ID	Sample Code	Run No.	Conc. (ng/mL)	Std. Dilution Factor	Peak Area	Analyte Found (ng/mL)	Amount Added (ng/mL)	Recovery (%)
0.2 ng/mL Standard	-	CS	091905AR-701	0.2	-	18765	-	-	-
0.5 ng/mL Standard	-	CS	091905AR-702	0.5	-	40286	-	-	-
1.0 ng/mL Standard	-	CS	091905AR-703	1.0	-	77247	-	-	-
5 ng/mL Standard	-	CS	091905AR-704	5.0	-	352555	-	-	-
10 ng/mL Standard	-	CS	091905AR-705	10.0	-	687254	-	-	-
50 ng/mL Standard	-	CS	091905AR-706	50.0	-	3160048	-	-	-
Methanol Wash	-	C	091905AR-707	-	-	1433	-	-	-
L6042-2	MW-2	S	091905AR-708	-	1000	81441	*	-	-
L6042-2	MW-2	S	091905AR-709	-	100	452070	703	-	-
L6042-3	MW-3	S	091905AR-710	-	100	44926	*	-	-
L6042-3	MW-3	S	091905AR-711	-	10	398806	61.8	-	-
L6042-4	MW-4	S	091905AR-712	-	10	149942	*	-	-
L6042-4	MW-4	S	091905AR-713	-	1	992075	15.6	-	-
L6042-5	FES	S	091905AR-714	-	10000000	1096974	172368609	-	-
Methanol Wash	-	C	091905AR-715	-	-	2658	-	-	-
0.2 ng/mL Standard	-	CS	091905AR-716	0.2	-	19262	-	-	-
0.5 ng/mL Standard	-	CS	091905AR-717	0.5	-	38838	-	-	-
L6042-6	RES-SW-1	S	091905AR-718	-	1	45239	0.584	-	-
L6042-7	SS-1	S	091905AR-719	-	1	38085	0.471**	-	-
L6042-8	CG-DW-1	S	091905AR-720	-	1	51989	0.691	-	-
L6042-9	46CB	S	091905AR-721	-	1	6956	ND	-	-
L6042-10	85CB	S	091905AR-722	-	1	30394	0.349	-	-
1.0 ng/mL Standard	-	CS	091905AR-723	1.0	-	73620	-	-	-
5 ng/mL Standard	-	CS	091905AR-724	5.0	-	338527	-	-	-
10 ng/mL Standard	-	CS	091905AR-725	10.0	-	664675	-	-	-
50 ng/mL Standard	-	CS	091905AR-726	50.0	-	3054270	-	-	-

Analyte Found (ng/mL) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ng/mL)} - \text{analyte found in control (ng/mL)}] \times 100}{\text{amount added (ng/mL)}}$

Standard Curve : Linear (1/x weighted)

Intercept = 8357.64

Slope = 63156.3

Coeff. Of Det. = 0.998858

CS = Calibration standard

LF = Lab fortified sample

C = Control sample

FF = Field fortified sample

S = Sample

LCS = Laboratory Control Spike

ND = Not detected = Response between 0 and 200 ng/mL.

Spreadsheet prepared by: *KR, 09/21/05*

*Sample was analyzed at several dilution levels in this set. The appropriate result is reported

**Analyte found (ng/g) = Analyte found (ng/mL) x volume extracted (10 mL) / sample weight (1g) = 4.71 ng/g

Masslynx - Sample List

Page 1

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\091905A\Taconic Water.SPL
 Printed: Wed Sep 21 06:14:09 2005

R 09/21/05
 Oxygen STUDY NO. *L6042*

Page Position: (1, 1)

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/mL)	Conc B	Conc C	Test ID	DF
1	1	091905AR-701	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	---	0	1
2	2	091905AR-702	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	---	0	1
3	3	091905AR-703	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	---	0	1
4	4	091905AR-704	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	---	0	1
5	5	091905AR-705	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	---	0	1
6	6	091905AR-706	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	---	0	1
7	92	091905AR-707	---	Methanol Wash	---	Blank	---	---	---	0	1
8	41	091905AR-708	---	L6042-2, DF=1000	---	Analyte	---	---	0	1000	
9	42	091905AR-709	---	L6042-2, DF=100	---	Analyte	---	---	0	100	
10	43	091905AR-710	---	L6042-3, DF=100	---	Analyte	---	---	0	100	
11	44	091905AR-711	---	L6042-3, DF=10	---	Analyte	---	---	0	10	
12	45	091905AR-712	---	L6042-4, DF=10	---	Analyte	---	---	0	10	
13	46	091905AR-713	---	L6042-4	---	Analyte	---	---	0	1	
14	47	091905AR-714	---	L6042-5, DF=10000000	---	Analyte	---	---	0	100000000	
15	92	091905AR-715	---	Methanol Wash	---	Blank	---	---	0	1	
16	1	091905AR-716	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	0	1	
17	2	091905AR-717	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	0	1	
18	48	091905AR-718	---	L6042-6	---	Analyte	---	---	0	1	
19	49	091905AR-719	---	L6042-7, 1g, 10 mL	---	Analyte	---	---	0	1	
20	50	091905AR-720	---	L6042-8	---	Analyte	---	---	0	1	
21	33	091905AR-721	---	L6042-9	---	Analyte	---	---	0	1	
22	34	091905AR-722	---	L6042-10	---	Analyte	---	---	0	1	
23	3	091905AR-723	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	0	1	
24	4	091905AR-724	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	0	1	
25	5	091905AR-725	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	0	1	
26	6	091905AR-726	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	0	1	

TAC EPA 00489

000480

*R. @ Rabelos**bc 09/21/05*Exogen STUDY NO. Ub042

MS Method HPLC Method MS Tune File Inj. Volume

1	PFOA 12 MIN	pfbS water	Fluorochems	15
2	PFOA 12 MIN	pfbS water	Fluorochems	15
3	PFOA 12 MIN	pfbS water	Fluorochems	15
4	PFOA 12 MIN	pfbS water	Fluorochems	15
5	PFOA 12 MIN	pfbS water	Fluorochems	15
6	PFOA 12 MIN	pfbS water	Fluorochems	15
7	PFOA 12 MIN	pfbS water	Fluorochems	15
8	PFOA 12 MIN	pfbS water	Fluorochems	15
9	PFOA 12 MIN	pfbS water	Fluorochems	15
10	PFOA 12 MIN	pfbS water	Fluorochems	15
11	PFOA 12 MIN	pfbS water	Fluorochems	15
12	PFOA 12 MIN	pfbS water	Fluorochems	15
13	PFOA 12 MIN	pfbS water	Fluorochems	15
14	PFOA 12 MIN	pfbS water	Fluorochems	15
15	PFOA 12 MIN	pfbS water	Fluorochems	15
16	PFOA 12 MIN	pfbS water	Fluorochems	15
17	PFOA 12 MIN	pfbS water	Fluorochems	15
18	PFOA 12 MIN	pfbS water	Fluorochems	15
19	PFOA 12 MIN	pfbS water	Fluorochems	15
20	PFOA 12 MIN	pfbS water	Fluorochems	15
21	PFOA 12 MIN	pfbS water	Fluorochems	15
22	PFOA 12 MIN	pfbS water	Fluorochems	15
23	PFOA 12 MIN	pfbS water	Fluorochems	15
24	PFOA 12 MIN	pfbS water	Fluorochems	15
25	PFOA 12 MIN	pfbS water	Fluorochems	15
26	PFOA 12 MIN	pfbS water	Fluorochems	15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exxygen Study No: L6042

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100

HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exxygen ID: MA0019403
(JONESCHROMATOGRAPHY: Part No. FK5962E))

Mobile Phase (A) : 2 mM Ammonium Acetate in Water

Mobile Phase (B) : Methanol

10/21/05
Kris

Analyst: Karen Risha
Exxygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

**NOTE: The next 3 pages are computer generated printouts from
the masslynx software program. The pages contain the
instrument settings used for the analysis of this data set.**

All Handwritten Peak ID's by: _____

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\PFOA 12 MIN
Last Modified: Wed Apr 13 15:44:53 2005

Printed: Wed Sep 21 06:09:45 2005

10/09/21/05

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused
Function : 1 MRM of 1 Mass Pair (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1	413.00	369.00	0.20	10	10

Method File:

C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\pfbs water

Last Modified:

Wednesday, September 21, 2005 05:56:13

Printed:

Wednesday, September 21, 2005 06:11:45

PF 09/21/05

HP1100 LC Pump Initial Conditions

Solvents

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left(°C)	30.0
Oven Temperature Right(°C)	30.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.00
Stop Time (mins)	20.00
Injection Volume(μl)	15.0
Vial Number	46

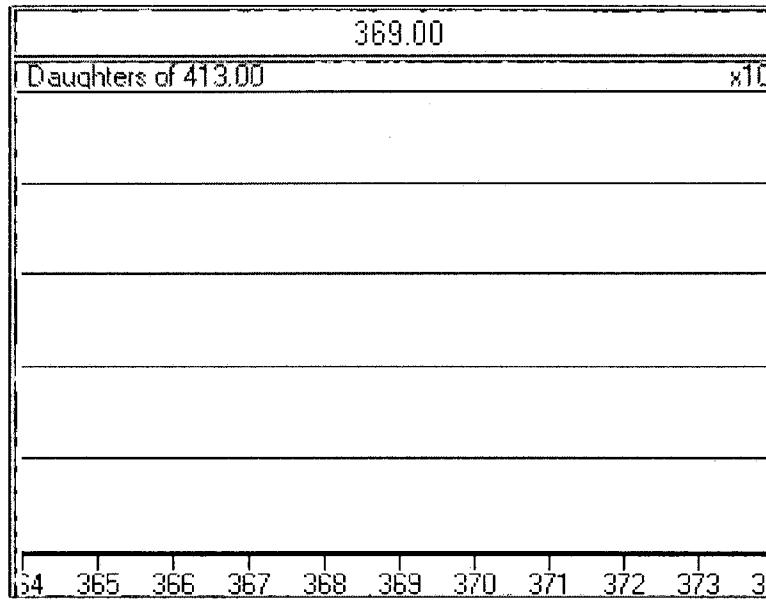
Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\FLUOROCHEMS

Printed: Wed Sep 21 06:10:44 2005

Sep 21/05



Dau 413.00

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.93	LM Res 1	13.5	
Cone	10	-10	HM Res 1	13.5	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	28
Hexapole 2	0.0		Collision	30	29
Source Block Temp.	100	100	Exit	2	31
Desolvation Temp.	300	299	LM Res 2	13.5	
			HM Res 2	13.5	
			IEnergy 2	2.0	
			Multiplier	650	-648
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	187.5	
Gas Cell	3.5e-3		Desolvation	782.1	

Quantify Calibration Report

Page 1

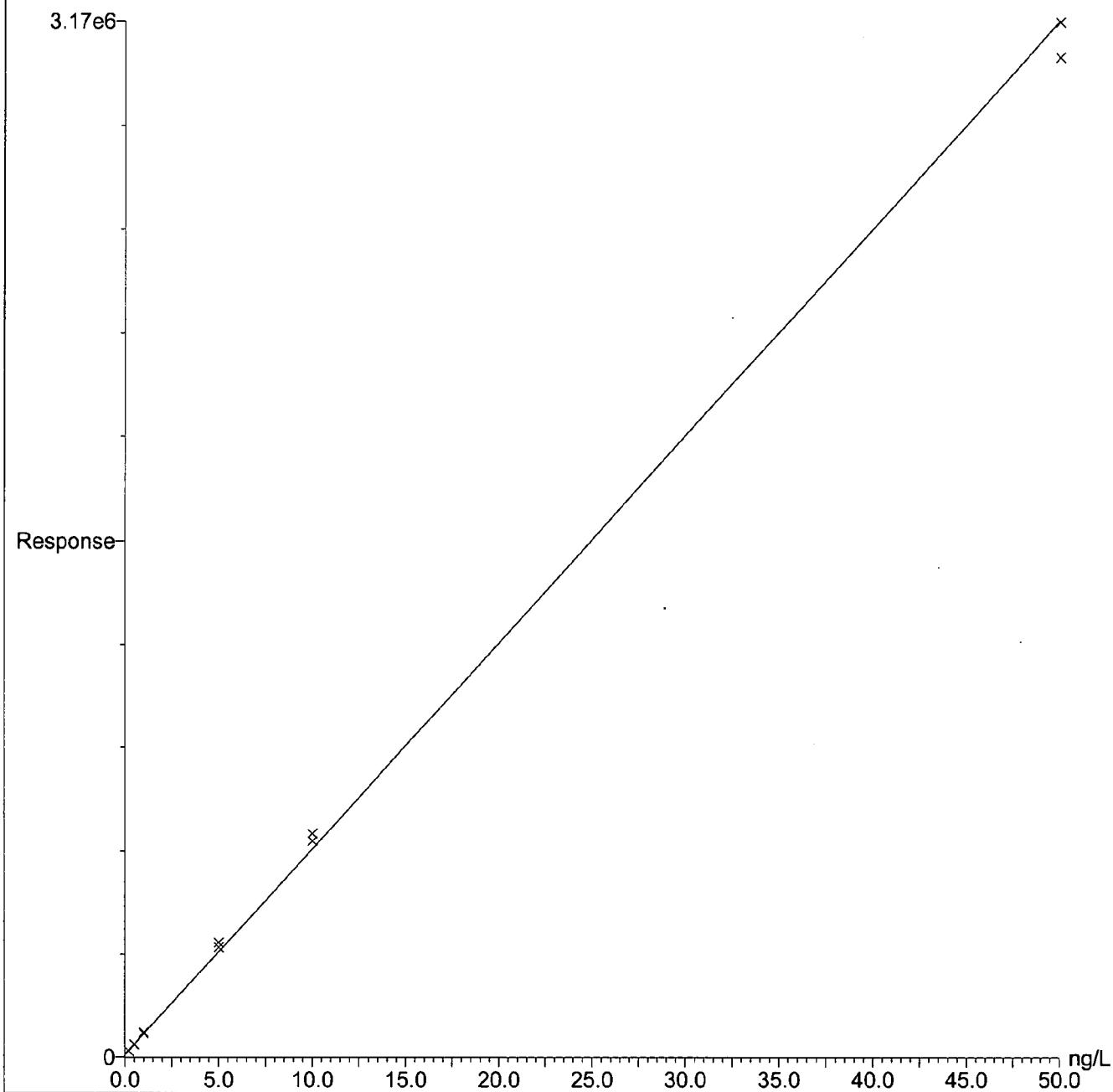
Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\091905AR Taconic Water
Last modified: Thu Sep 22 07:19:11 2005
Printed: Thu Sep 22 07:20:06 2005

10/09/2005

Compound 1 name: C8 Acid
Coefficient of Determination: 0.998858
Calibration curve: $63156.3 * x + 8357.64$
Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Quantify Sample Report

Page 1

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Initials *KR*

Date 9/22/05

Run# 091905AR-701 To 091905AR-726

Name: 091905AR-701

Text:

1: C8 Acid

C033105-6, 0.2 ng/mL Standard

21-Sep-2005 06:47:10

LC/MS/MS #6

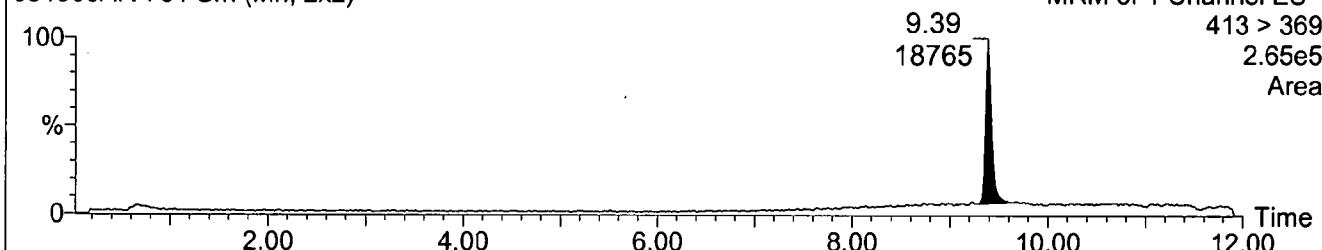
091905AR-701 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.65e5

Area



Quantify Sample Report

Page 2

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-702

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

21-Sep-2005 07:08:51

LC/MS/MS #6

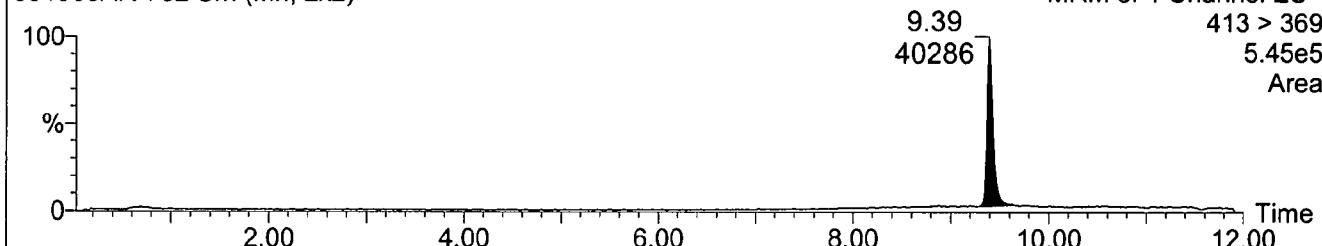
091905AR-702 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

5.45e5

Area



Quantify Sample Report

Page 3

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-703

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

21-Sep-2005 07:30:31

LC/MS/MS #6

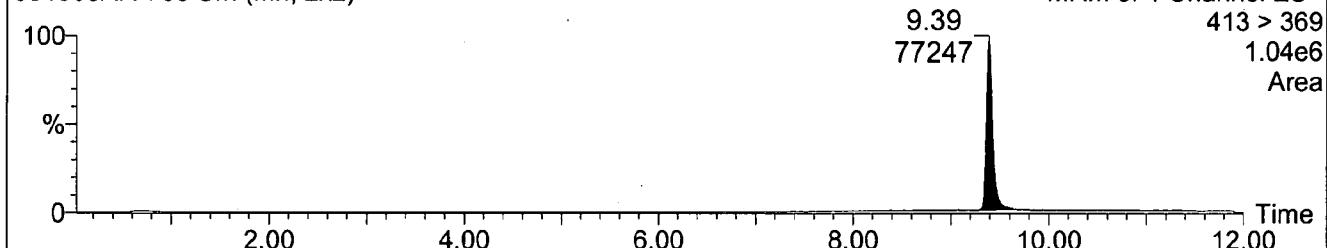
091905AR-703 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.04e6

Area



Quantify Sample Report

Page 4

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-704

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

21-Sep-2005 07:52:13

LC/MS/MS #6

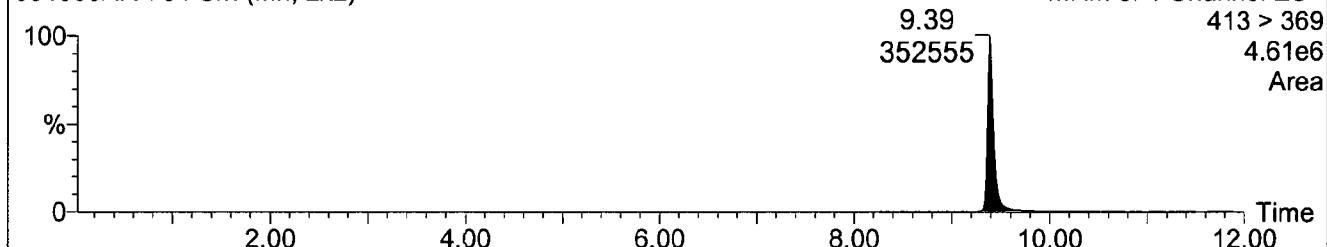
091905AR-704 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

4.61e6

Area



Quantify Sample Report

Page 5

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-705

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

21-Sep-2005 08:13:55

LC/MS/MS #6

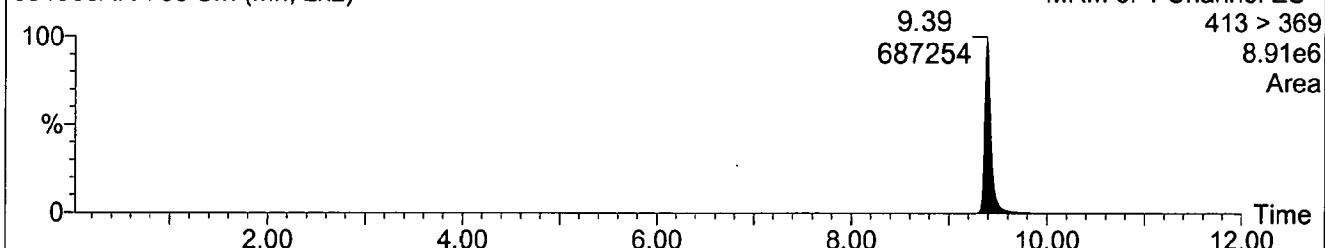
091905AR-705 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

8.91e6

Area



Quantify Sample Report

Page 6

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-706

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

21-Sep-2005 08:35:39

LC/MS/MS #6

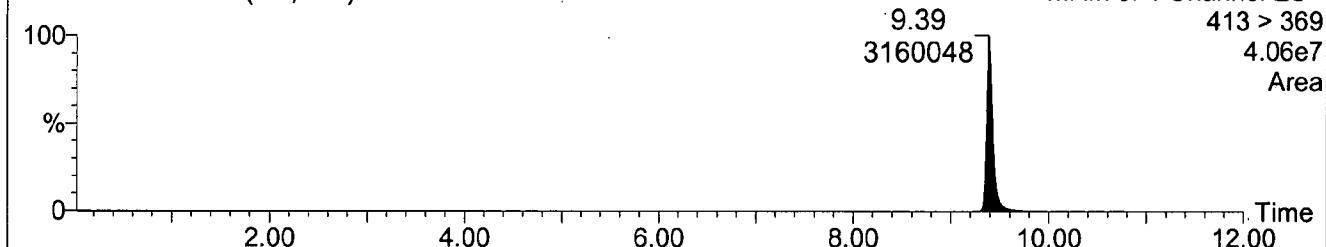
091905AR-706 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

4.06e7

Area



Quantify Sample Report

Page 7

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

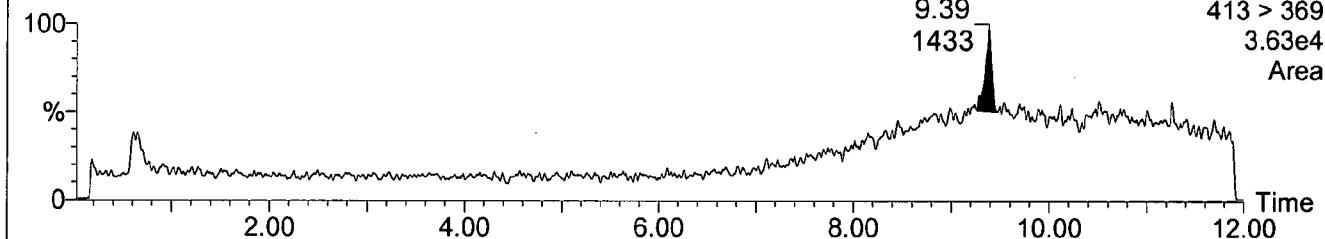
Name: 091905AR-707

Text:

1: C8 Acid

Methanol Wash

091905AR-707 Sm (Mn, 2x2)



Quantify Sample Report

Page 8

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

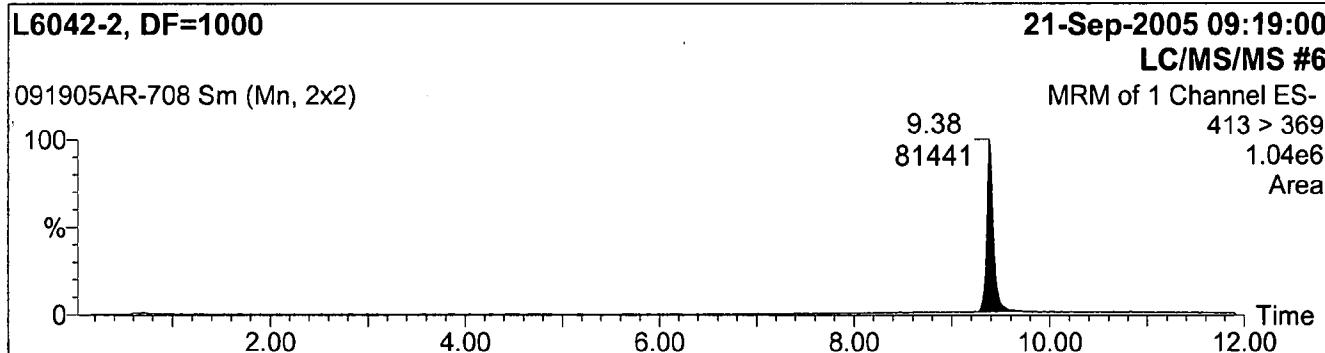
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-708

Text:

1: C8 Acid



Quantify Sample Report

Page 9

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-709

Text:

1: C8 Acid

L6042-2, DF=100

21-Sep-2005 09:40:37

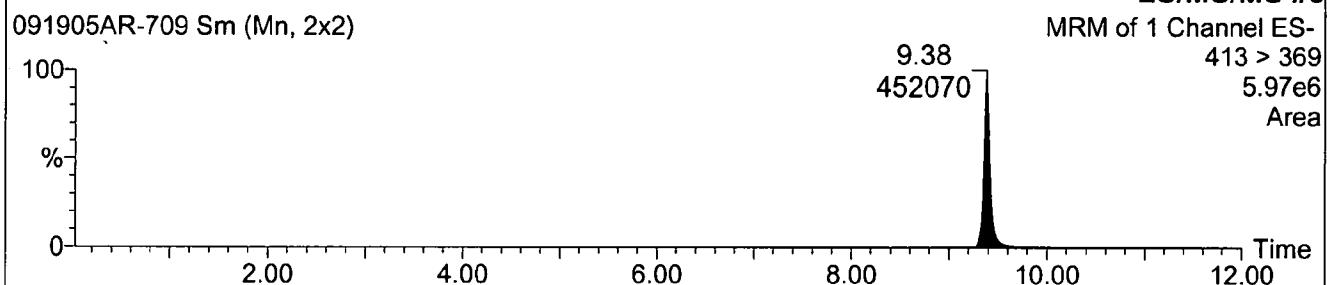
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

5.97e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Page 10

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

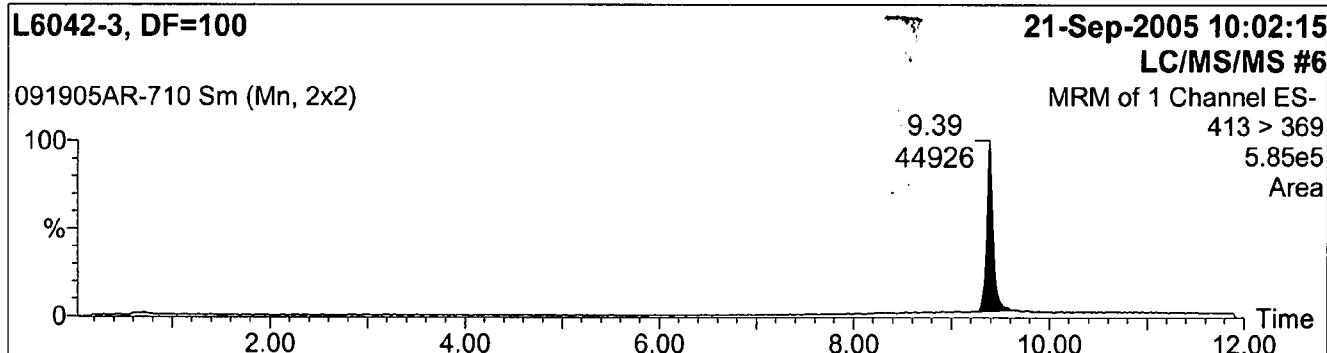
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-710

Text:

1: C8 Acid



Quantify Sample Report

Page 11

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal-

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-711

Text:

1: C8 Acid

L6042-3, DF=10

21-Sep-2005 10:23:56

LC/MS/MS #6

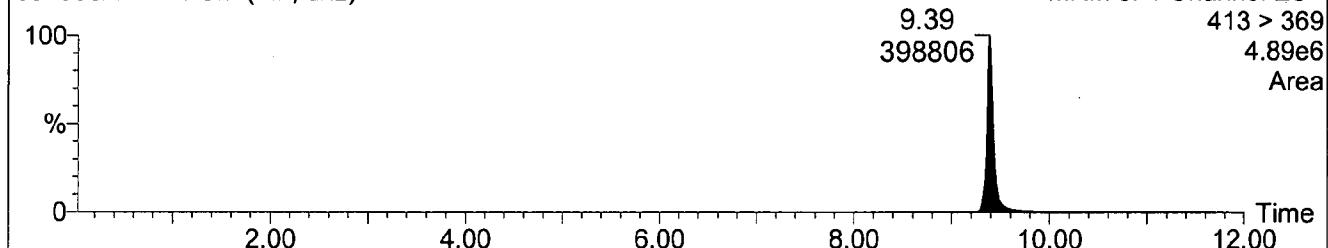
091905AR-711 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

4.89e6

Area



Quantify Sample Report

Page 12

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-712

Text:

1: C8 Acid

L6042-4, DF=10

21-Sep-2005 10:45:41

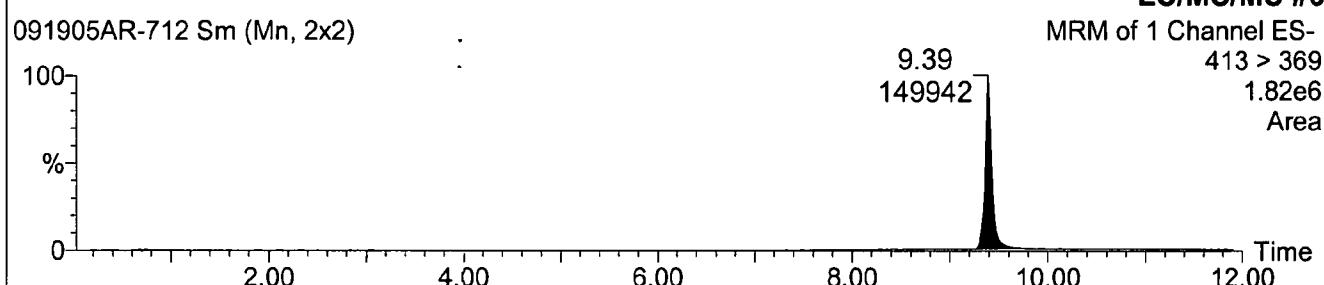
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

1.82e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Page 13

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

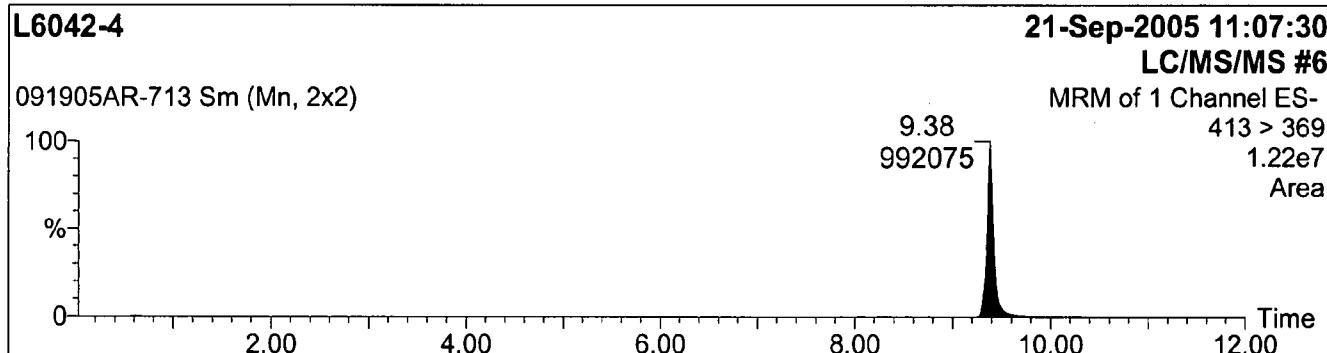
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-713

Text:

1: C8 Acid



Quantify Sample Report

Page 14

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-714

Text:

1: C8 Acid

L6042-5, DF=10000000

21-Sep-2005 11:29:16

LC/MS/MS #6

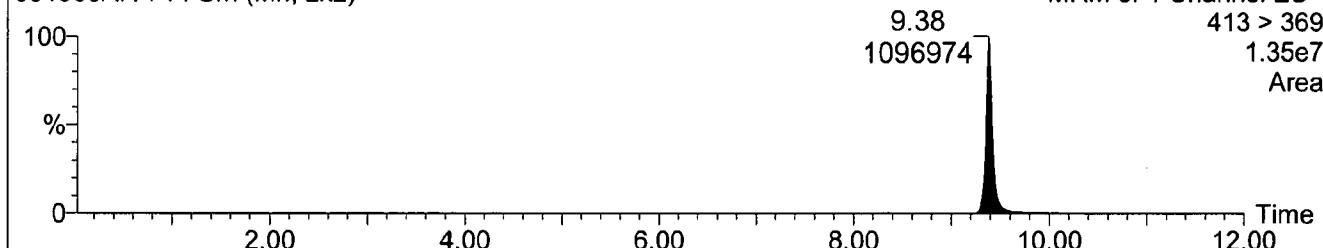
091905AR-714 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.35e7

Area



Quantify Sample Report

Page 15

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-715

Text:

1: C8 Acid

Methanol Wash

21-Sep-2005 11:51:03

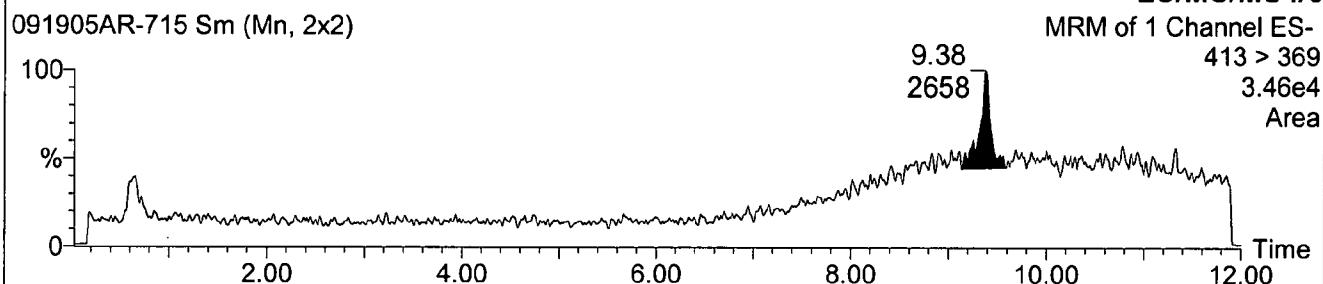
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

3.46e4

Area



Quantify Sample Report

Page 16

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-716

Text:

1: C8 Acid

C033105-6, 0.2 ng/mL Standard

21-Sep-2005 12:12:46

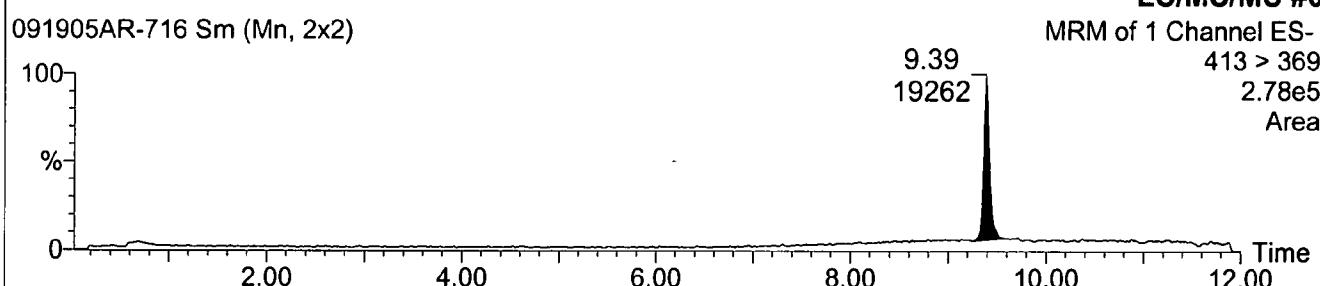
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

2.78e5

Area



Quantify Sample Report

Page 17

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal-

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-717

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

21-Sep-2005 12:34:25

LC/MS/MS #6

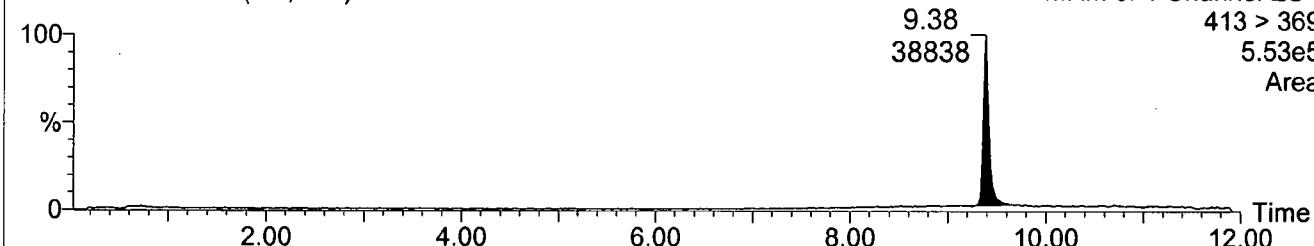
091905AR-717 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

5.53e5

Area



Quantify Sample Report
Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Page 18

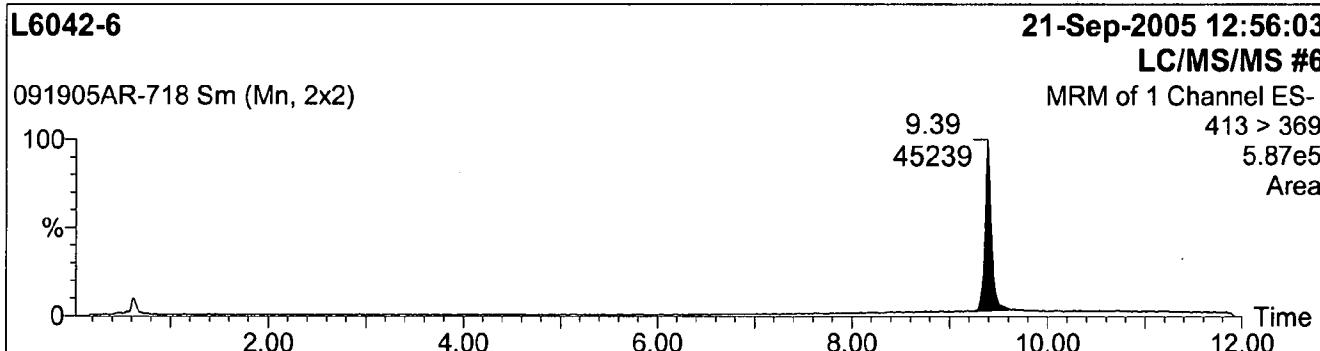
Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat
Last modified: Thu Sep 22 07:13:00 2005
Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805
Last modified: Fri Apr 15 09:21:49 2005
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-718

Text:

1: C8 Acid



Quantify Sample Report

Page 19

Study No.: L6042, Set No.: 091905AR, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

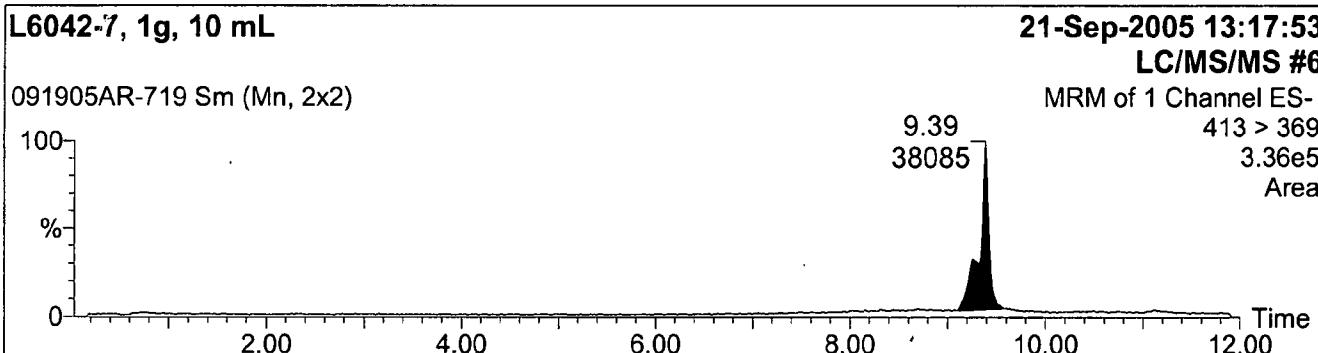
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-719

Text:

1: C8 Acid



Quantify Sample Report

Page 20

Study No.: L6042, Set No.: 091905AR, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

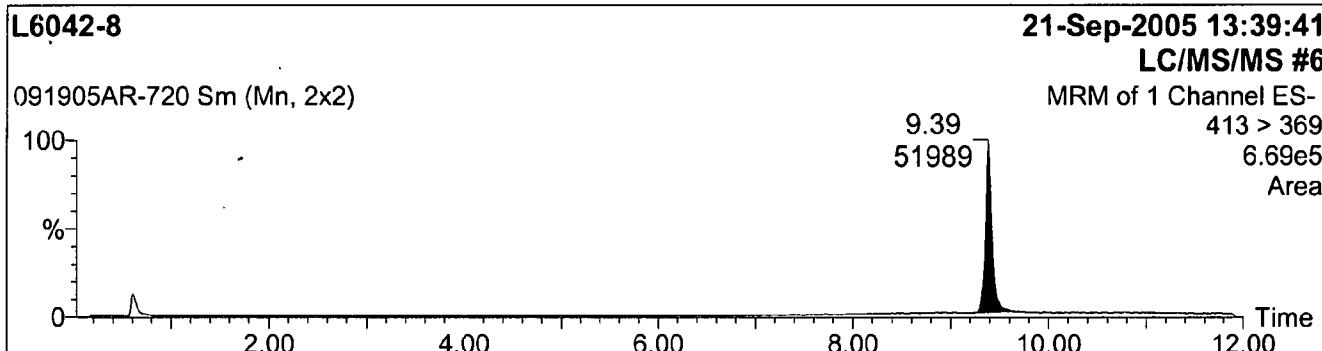
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-720

Text:

1: C8 Acid



Quantify Sample Report

Page 21

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

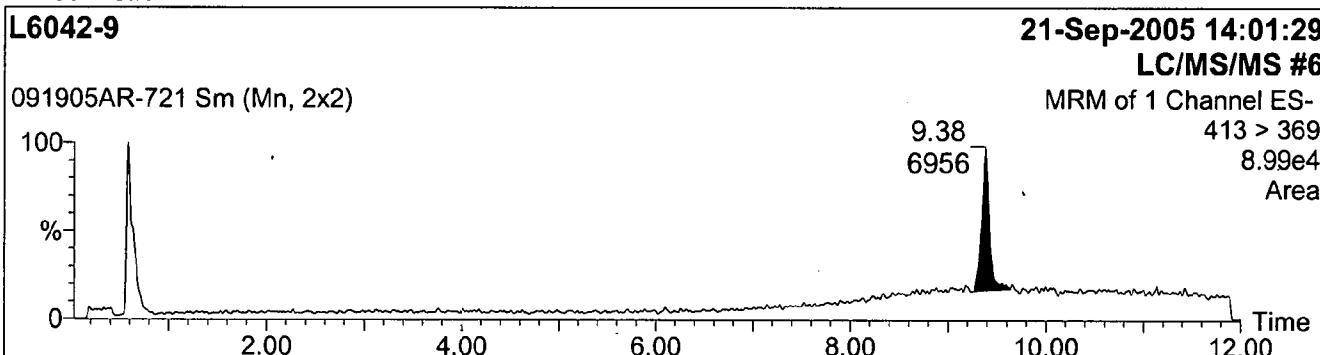
Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-721

Text:

1: C8 Acid



Quantify Sample Report

Page 22

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

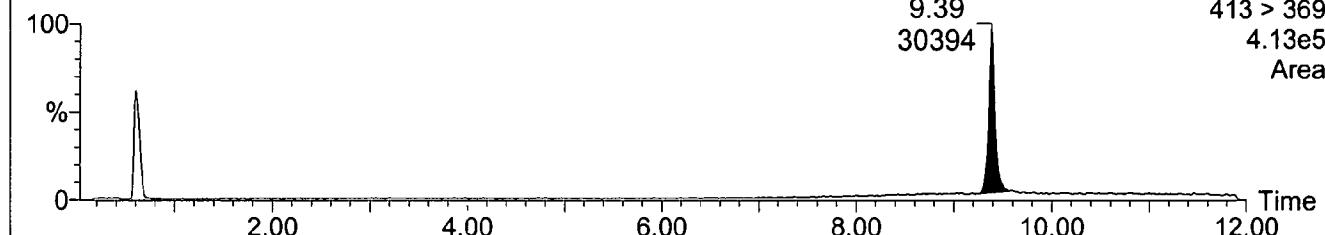
Name: 091905AR-722

Text:

1: C8 Acid

L6042-10

091905AR-722 Sm (Mn, 2x2)



Quantify Sample Report

Page 23

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-723

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

21-Sep-2005 14:44:53

LC/MS/MS #6

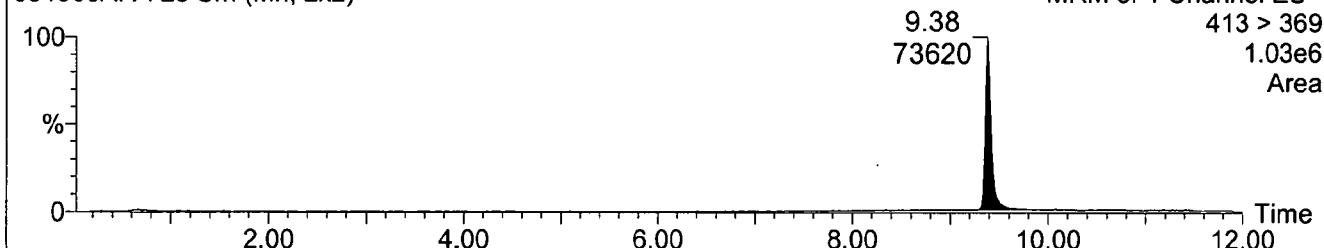
091905AR-723 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.03e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Page 24

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wat
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-724

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

21-Sep-2005 15:06:37

LC/MS/MS #6

091905AR-724 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

100

9.38

%

338527

0

Time

2.00 4.00

6.00

8.00

10.00

12.00

Oxygen Research, 3058 Research Drive, State College, PA 16801

TAC EPA 00519

000510

Quantify Sample Report

Page 25

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wa

Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-725

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

21-Sep-2005 15:28:19

LC/MS/MS #6

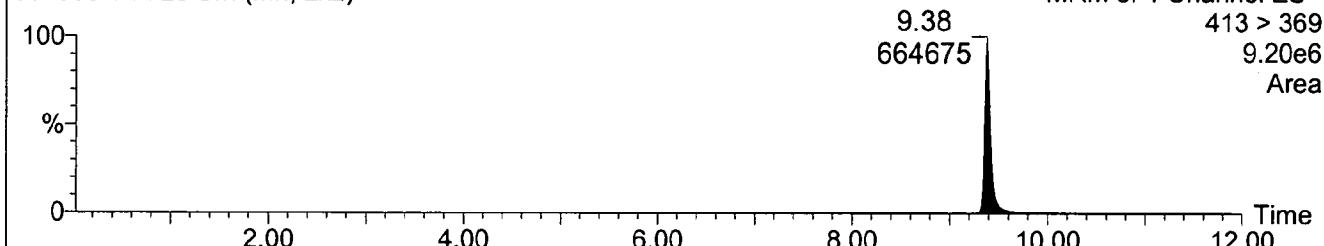
091905AR-725 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

9.20e6

Area



Quantify Sample Report

Page 26

Study No.:L6042, Set No.:091905AR, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\091905AR Taconic Wal
Last modified: Thu Sep 22 07:13:00 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Thu Sep 22 07:20:07 2005

Name: 091905AR-726

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

21-Sep-2005 15:50:04

LC/MS/MS #6

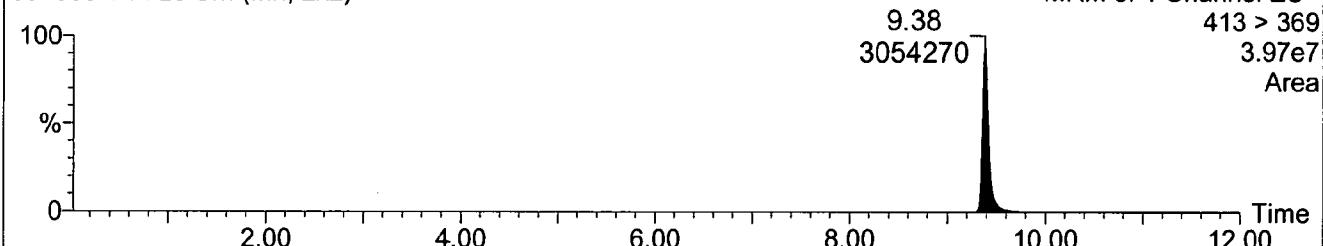
091905AR-726 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

3.97e7

Area



RAW DATA REPORT

Sponsor Study No: NA Limit of Quantitation: 0.2 ng/mL Set No: 100305A
 Oxygen Study No: L6042 Injection Volume: 15 µL Analyst: Karen Risha
 Analyte: C8 Acid (PFOA) Matrix: Water Instrument Type: LC/MS/MS Unit # 6
 Ions Monitored: 415 -> 369 Sample Volume: NA Extraction Date: NA
 Site: NA Final Volume: NA Analyzed on: 10/03/05

Exogen ID	Sponsor ID	Sample Code	Run No.	Std. Conc. (ng/mL)	Dilution Factor	Peak Area	Analyte Found (ng/mL)	Amount Added (ng/mL)	Recovery (%)
0.2 ng/mL Standard	-	CS	100305A-801	0.2	-	5705	-	-	-
0.5 ng/mL Standard	-	CS	100305A-802	0.5	-	13991	-	-	-
1.0 ng/mL Standard	-	CS	100305A-803	1.0	-	35181	-	-	-
5 ng/mL Standard	-	CS	100305A-804	5.0	-	188509	-	-	-
10 ng/mL Standard	-	CS	100305A-805	10.0	-	390941	-	-	-
50 ng/mL Standard	-	CS	100305A-806	50.0	-	1911595	-	-	-
Methanol Wash	-	C	100305A-807	-	-	0	-	-	-
Reagent Control	-	C	100305A-808	-	-	0	-	-	-
Reagent Spk A	-	S	100305A-809	-	1	25940	0.579	0.5	116
Reagent Spk B	-	S	100305A-810	-	1	249835	5.22	5.0	104
L6042-4 Spk C	MW-4	S	100305A-811	-	1	1135389	23.6	10	111
L6042-9 Spk D	46CB	S	100305A-812	-	1	504903	10.5	10	105
0.2 ng/mL Standard	-	CS	100305A-813	0.2	-	11598	-	-	-
0.5 ng/mL Standard	-	CS	100305A-814	0.5	-	28454	-	-	-
1.0 ng/mL Standard	-	CS	100305A-815	1.0	-	56650	-	-	-
Methanol Wash	-	C	100305A-816	-	-	2342	-	-	-
L6042-4 Rep	MW-4	S	100305A-817	-	1	598082	12.4	-	-
L6042-9 Rep	46CB	S	100305A-818	-	1	0	ND	-	-
5 ng/mL Standard	-	CS	100305A-819	5.0	-	268232	-	-	-
10 ng/mL Standard	-	CS	100305A-820	10.0	-	547955	-	-	-
50 ng/mL Standard	-	CS	100305A-821	50.0	-	2456739	-	-	-

Analyte Found (ng/mL) = (peak area - intercept) / slope x DF

Recovery (%) = $\frac{[\text{analyte found (ng/mL)} - \text{analyte found in control (ng/mL)}]}{\text{amount added (ng/mL)}} \times 100$

Standard Curve : Linear (1/x weighted)

Intercept = -2010.07

Slope = 48274.2

Coef. Of Det. = 0.996426

CS = Calibration standard

C = Control sample

S = Sample

LF = Lab fortified sample

FF = Field fortified sample

LCS = Laboratory Control Spike

ND = Not detected = Response between 0 and 200 ng/mL.

Spreadsheet prepared by:

[Signature], 10/04/05

Masslynx - Sample List

Page 1

Sample List: C:\MASSLYNX\Fluorochemicals.PRO\SampleDB\100305A Taconic Water.SPL
 Printed: Mon Oct 03 15:00:04 2005

Oxygen STUDY NO. 16042

Page Position: (1, 1)

RF 10/03/05

Vial	File Name	LIMS ID	Client ID	Sample Description	Matrix	Sample Type	Conc (ng/mL)	Conc B	Conc C	Test ID	DF	MS Method
1	3	100305A-801	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	---	0	1	PFOA 12 MIN
2	4	100305A-802	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	---	0	1	PFOA 12 MIN
3	5	100305A-803	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	---	0	1	PFOA 12 MIN
4	6	100305A-804	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	---	0	1	PFOA 12 MIN
5	7	100305A-805	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	---	0	1	PFOA 12 MIN
6	8	100305A-806	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	---	0	1	PFOA 12 MIN
7	92	100305A-807	---	Methanol Wash	---	Blank	---	---	---	0	1	PFOA 12 MIN
8	41	100305A-808	---	Reagent Control	---	Blank	---	---	---	0	1	PFOA 12 MIN
9	42	100305A-809	---	Reagent Spk A, 0.5 ng/mL	---	QC	0.5	---	---	0	1	PFOA 12 MIN
10	43	100305A-810	---	Reagent Spk B, 5.0 ng/mL	---	QC	5.0	---	---	0	1	PFOA 12 MIN
11	44	100305A-811	---	L6042-4 Spk C, 10 ng/mL	---	QC	10	---	---	0	1	PFOA 12 MIN
12	45	100305A-812	---	L6042-9 Spk D, 10 ng/mL	---	QC	10	---	---	0	1	PFOA 12 MIN
13	3	100305A-813	---	C033105-6, 0.2 ng/mL Standard	---	Standard	0.2	---	---	0	1	PFOA 12 MIN
14	4	100305A-814	---	C033105-5, 0.5 ng/mL Standard	---	Standard	0.5	---	---	0	1	PFOA 12 MIN
15	5	100305A-815	---	C033105-4, 1.0 ng/mL Standard	---	Standard	1.0	---	---	0	1	PFOA 12 MIN
16	92	100305A-816	---	Methanol Wash	---	Blank	---	---	---	0	1	PFOA 12 MIN
17	46	100305A-817	---	L6042-4, Rep	---	Analyte	---	---	---	0	1	PFOA 12 MIN
18	47	100305A-818	---	L6042-9, Rep	---	Analyte	---	---	---	0	1	PFOA 12 MIN
19	6	100305A-819	---	C033105-3, 5.0 ng/mL Standard	---	Standard	5.0	---	---	0	1	PFOA 12 MIN
20	7	100305A-820	---	C033105-2, 10 ng/mL Standard	---	Standard	10	---	---	0	1	PFOA 12 MIN
21	8	100305A-821	---	C033105-1, 50 ng/mL Standard	---	Standard	50	---	---	0	1	PFOA 12 MIN

TAC EPA 00523

000514

PF 10/03/05

Oxygen STUDY NO. 16042

HPLC Method	MS Tune File	Inj. Volume
-------------	--------------	-------------

1	pfb water	Fluorochems 15
2	pfb water	Fluorochems 15
3	pfb water	Fluorochems 15
4	pfb water	Fluorochems 15
5	pfb water	Fluorochems 15
6	pfb water	Fluorochems 15
7	pfb water	Fluorochems 15
8	pfb water	Fluorochems 15
9	pfb water	Fluorochems 15
10	pfb water	Fluorochems 15
11	pfb water	Fluorochems 15
12	pfb water	Fluorochems 15
13	pfb water	Fluorochems 15
14	pfb water	Fluorochems 15
15	pfb water	Fluorochems 15
16	pfb water	Fluorochems 15
17	pfb water	Fluorochems 15
18	pfb water	Fluorochems 15
19	pfb water	Fluorochems 15
20	pfb water	Fluorochems 15
21	pfb water	Fluorochems 15

LC/MS/MS SYSTEM AND OPERATING CONDITIONS

Sponsor Protocol No: NA

Exygen Study No: L6042

Instrument: Micromass Quattro Ultima (LC/MS/MS Unit #6)

Computer: COMPAQ Professional Workstation AP200

Software: Microsoft Windows NT: Version 4 Build 1381: Service Pack 5
Micromass Limited: MassLynx 3.4 Build 004

HPLC Equipment: Hewlett Packard (HP) Series 1100
HP Bin Pump HP Vacuum Degasser
HP Autosampler HP Column Oven

HPLC Column: Genesis C-8, 5 cm x 2.1 mm i.d. x 4 μ (Exygen ID: MA0019403
(JONESCHROMATOGRAPHY: Part No. FK5962E)

Mobile Phase (A) : 2 mM Ammonium Acetate in Water
Mobile Phase (B) : Methanol

Analyst: Karen Risha
Exygen Research
3058 Research Drive, State College, PA 16801
Phone: (814) 272-1039 FAX: (814) 231-1580

10/03/05

**NOTE: The next 3 pages are computer generated printouts from
the masslynx software program. The pages contain the
instrument settings used for the analysis of this data set.**

All Handwritten Peak ID's by: *10/04/05*

Scanning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\PFOA 12 MIN
Last Modified: Wed Apr 13 15:44:53 2005

Printed: Mon Oct 03 15:04:43 2005

10/03/05

Solvent Delay (mins) : 0.00

Analog Channel 4 : Unused
Function : 1 MRM of 1 Mass Pair (ESP-)

Inter Channel Delay (Secs) : 0.03

Span (Daltons) : 0.00

Start Time (Mins) : 0.00

End Time (Mins) : 12.00

Repeats : 1

Channel	Parent	Daughter	Dwell (Secs)	Coll Energy (eV)	Cone (V)
1	413.00	369.00	0.20	10	10

Method Report

Page 1

Method File:

c:\masslynx\fluorochemicals.pro\acqudb\pfbs water

Last Modified:

Monday, October 03, 2005 15:03:08

Printed:

Monday, October 03, 2005 15:04:51

kbf 10/03/05

HP1100 LC Pump Initial Conditions**Solvents**

A%	90.0
B%	10.0
C%	0.0
D%	0.0

Flow (ml/min)	0.300
Stop Time (mins)	20.0
Min Pressure (bar)	0
Max Pressure (bar)	400
Oven Temperature Left (°C)	30.0
Oven Temperature Right (°C)	30.0

HP1100 LC Pump Gradient Timetable

The gradient Timetable contains 8 entries which are :

Time	A%	B%	C%	D%	Flow	Pressure
0.00	90.0	10.0	0.0	0.0	0.300	400
2.00	90.0	10.0	0.0	0.0	0.300	400
5.00	10.0	90.0	0.0	0.0	0.300	400
9.00	10.0	90.0	0.0	0.0	0.300	400
9.50	0.0	100.0	0.0	0.0	0.300	400
14.00	0.0	100.0	0.0	0.0	0.300	400
14.50	90.0	10.0	0.0	0.0	0.300	400
20.00	90.0	10.0	0.0	0.0	0.300	400

HP1100 LC Pump External Event Timetable

The Timetable contains 6 entries which are :

Time	Column Switch	Contact1	Contact2	Contact3	Contact4
Initial	Off	Off	Off	Off	Off
0.00	Off	On	Off	Off	Off
0.05	Off	Off	Off	Off	Off
0.10	Off	Off	On	Off	Off
11.90	Off	Off	Off	On	Off
12.00	Off	Off	Off	Off	Off

HP1100 Autosampler Initial Conditions

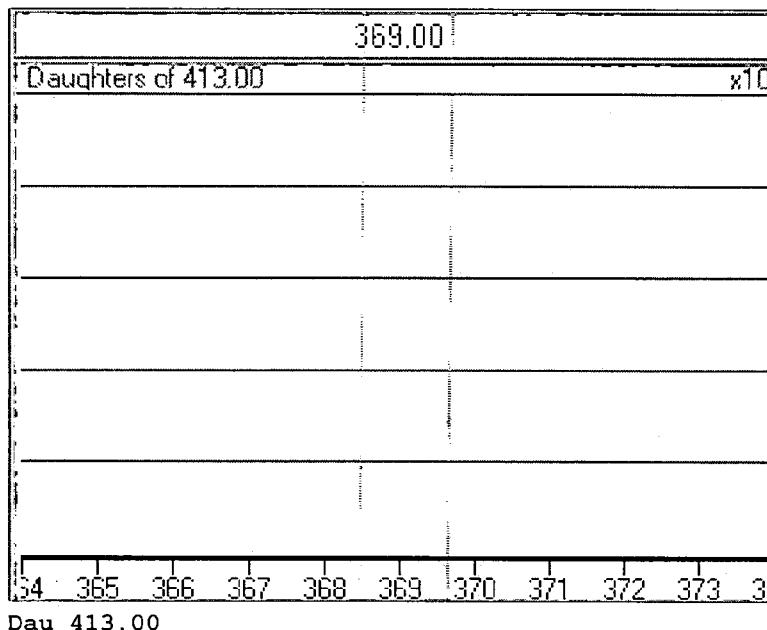
Draw Speed	200.0
Eject Speed (μl/min)	200
Draw Position (mm)	0.00
Stop Time (mins)	20.00
Injection Volume (μl)	15.0
Vial Number	6

Tuning Method Report

Page 1

Method: C:\MASSLYNX\FLUOROCHEMICALS.PRO\ACQUDB\FLUOROCHEMS

Printed: Mon Oct 03 15:05:13 2005

Kf 10/03/05

SOURCE (ESP-)	Set	Rdbk	Analyser	Set	Rdbk
Capillary	3.00	-2.92	LM Res 1	13.5	
Cone	10	-10	HM Res 1	13.5	
Hexapole 1	0.0		IEnergy 1	1.0	
Aperture 1	0.0		Entrance	-2	28
Hexapole 2	0.0		Collision	30	29
Source Block Temp.	100	99	Exit	2	31
Desolvation Temp.	300	305	LM Res 2	13.5	
			HM Res 2	13.5	
			IEnergy 2	2.0	
			Multiplier	650	-646
Pressures	Rdbk		Gas Flows	Rdbk	
Analyser Vacuum	OFF		Cone Gas	187.8	
Gas Cell	3.9e-3		Desolvation	787.9	

Quantify Calibration Report

Page 1

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Calibration: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\CurveDB\100305A Taconic Water
Last modified: Tue Oct 04 10:41:37 2005
Printed: Tue Oct 04 10:46:20 2005

KR 10/04/05

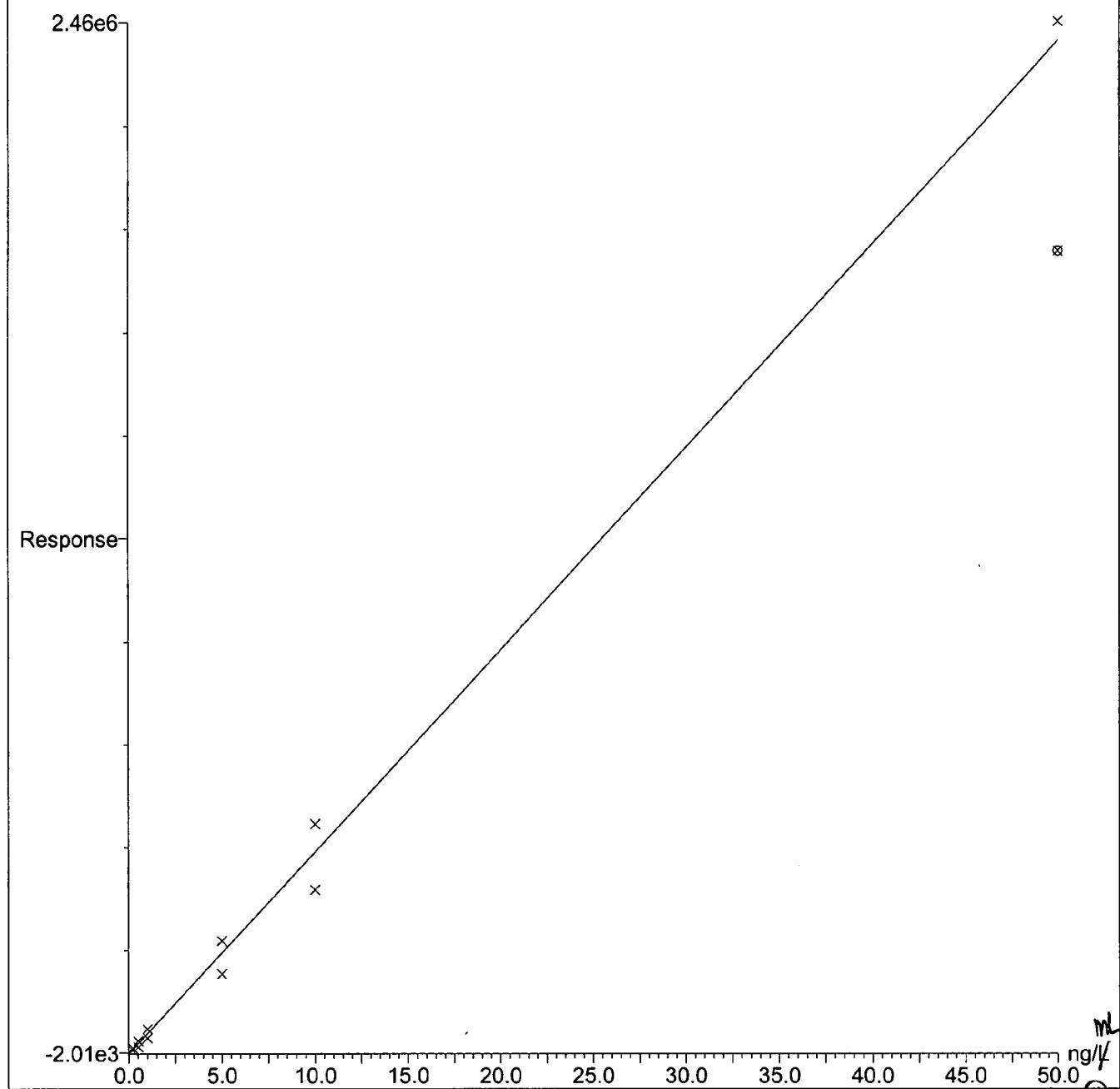
Compound 1 name: C8 Acid

Coefficient of Determination: 0.996426

Calibration curve: 48274.2 * x + -2010.07

Response type: External Std, Area

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None



Exogen Research, 3058 Research Drive, State College, PA 16801

④ KR 10/04/05

TAC EPA 00529

000520

Quantify Sample Report

Page 1

Study No.: L6042, Set No.: 100305A, Ext.Date: NA, Analyst: K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat-

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Initials KR

Date 10/04/05

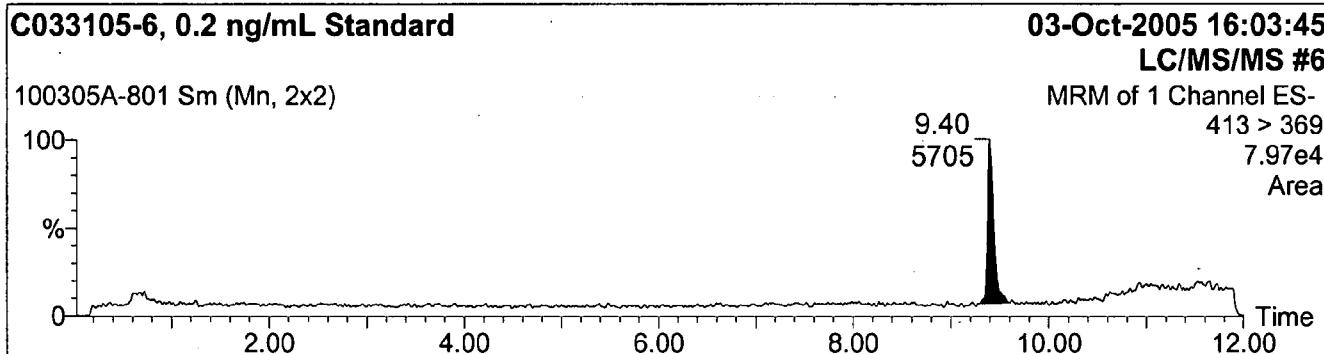
Run# 100305A-B01 To 100305A-B21

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-801

Text:

1: C8 Acid



Quantify Sample Report

Page 2

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-802

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

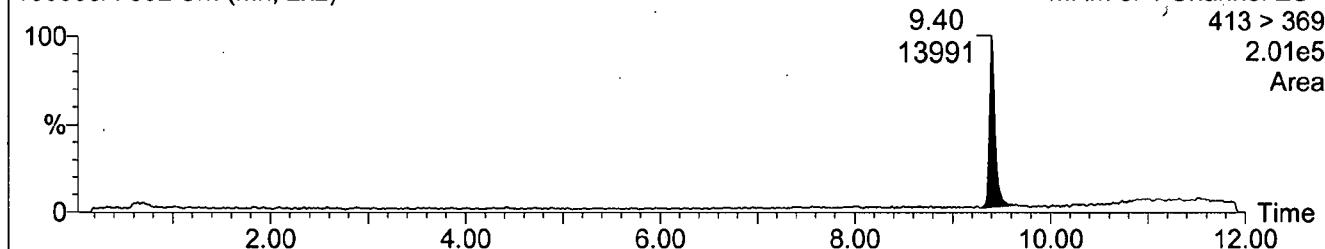
03-Oct-2005 16:25:29

LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

301e5



Quantify Sample Report

Page 3

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-803

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

03-Oct-2005 16:47:06

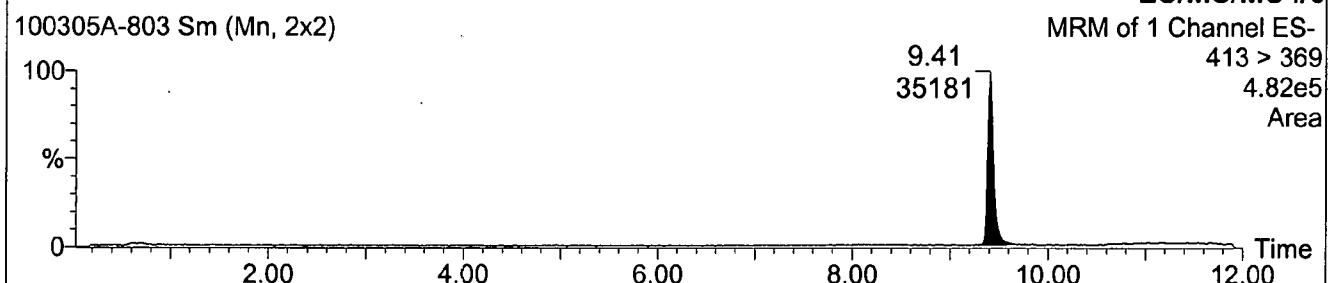
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

4.82e5

Area



Quantify Sample Report

Page 4

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-804

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

03-Oct-2005 17:08:44

LC/MS/MS #6

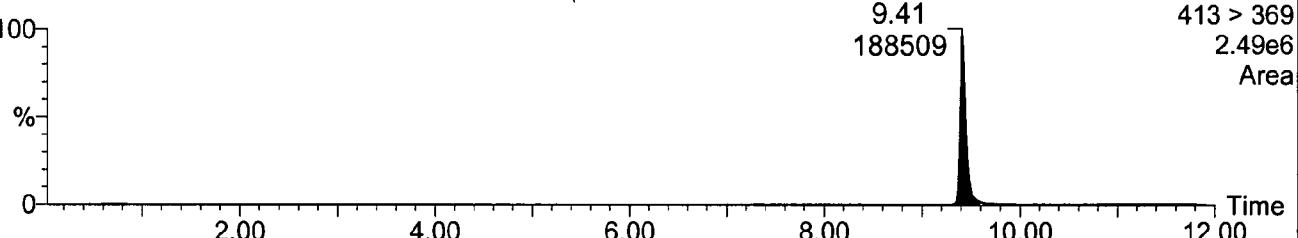
100305A-804 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.49e6

Area



Quantify Sample Report

Page 5

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-805

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

03-Oct-2005 17:30:30

LC/MS/MS #6

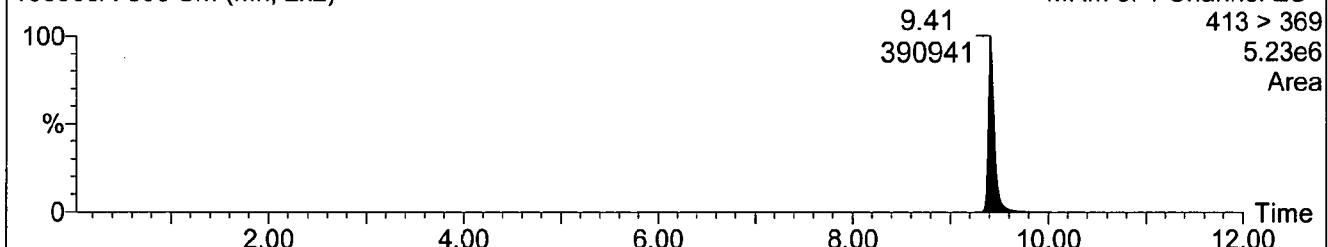
100305A-805 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

5.23e6

Area



Quantify Sample Report

Page 6

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-806

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

03-Oct-2005 17:52:18

LC/MS/MS #6

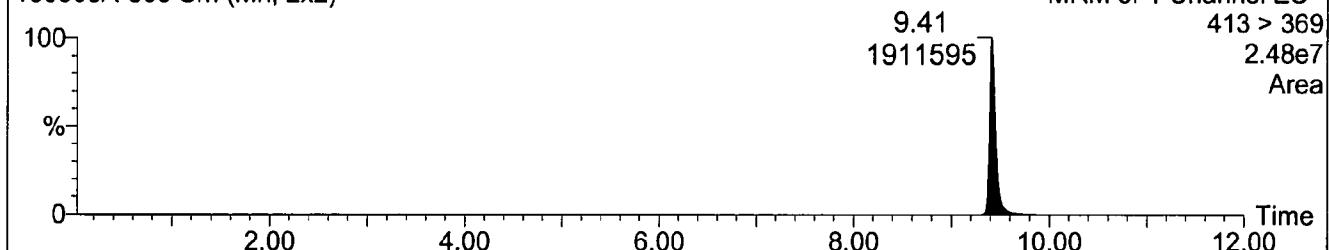
100305A-806 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

2.48e7

Area



Quantify Sample Report

Page 7

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

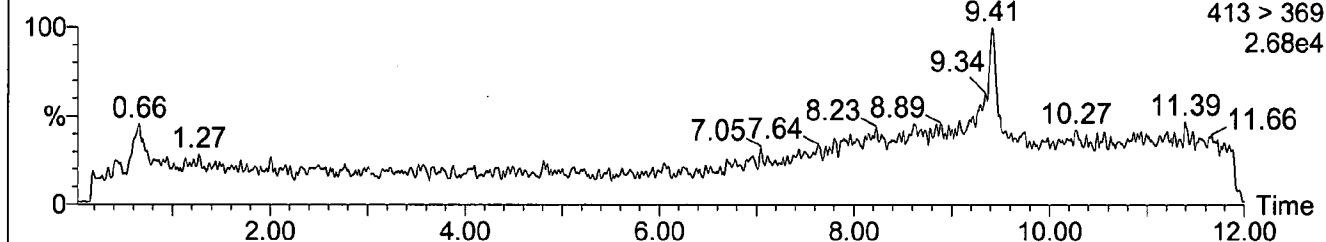
Name: 100305A-807

Text:

1: C8 Acid

Methanol Wash

100305A-807 Sm (Mn, 2x2)



Quantify Sample Report

Page 8

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

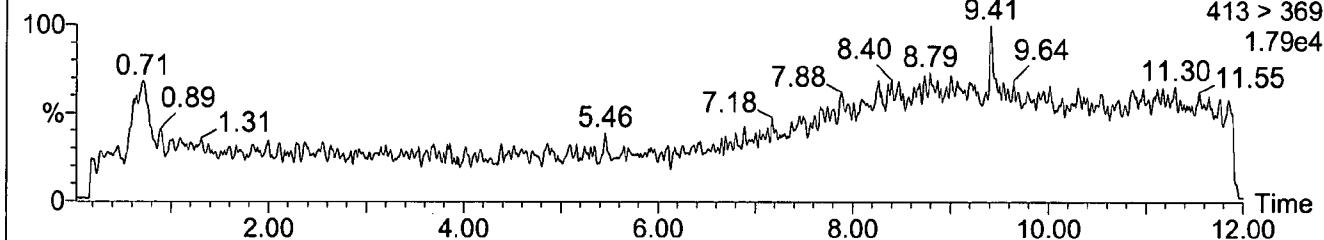
Name: 100305A-808

Text:

1: C8 Acid

Reagent Control

100305A-808 Sm (Mn, 2x2)



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 9

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-809

Text:

1: C8 Acid

Reagent Spk A, 0.5 ng/mL

03-Oct-2005 18:57:20

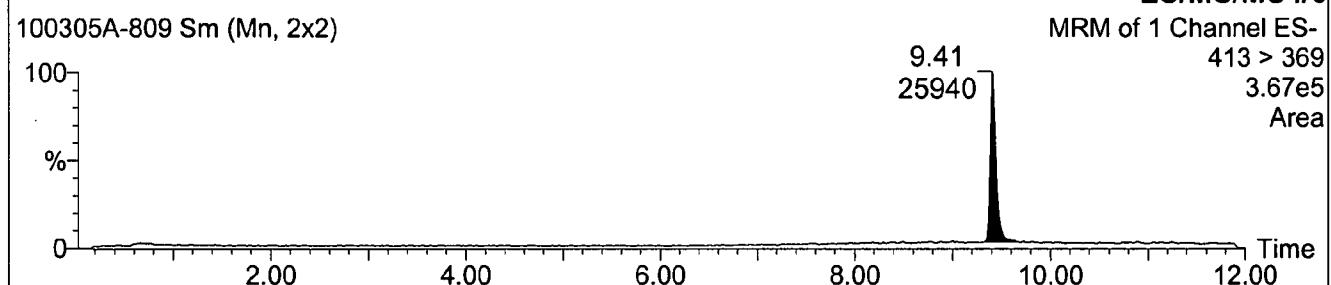
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

3.67e5

Area



Quantify Sample Report

Page 10

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-810

Text:

1: C8 Acid

Reagent Spk B, 5.0 ng/mL

03-Oct-2005 19:19:06

LC/MS/MS #6

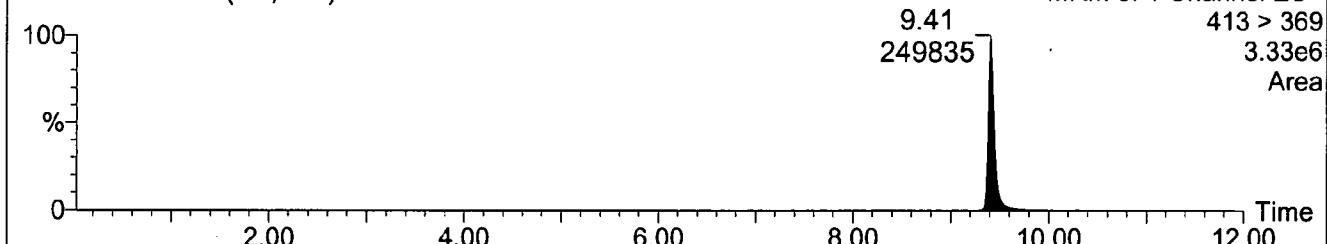
100305A-810 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

3.33e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 11

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-811

Text:

1: C8 Acid

L6042-4 Spk C, 10 ng/mL

03-Oct-2005 19:40:47

LC/MS/MS #6

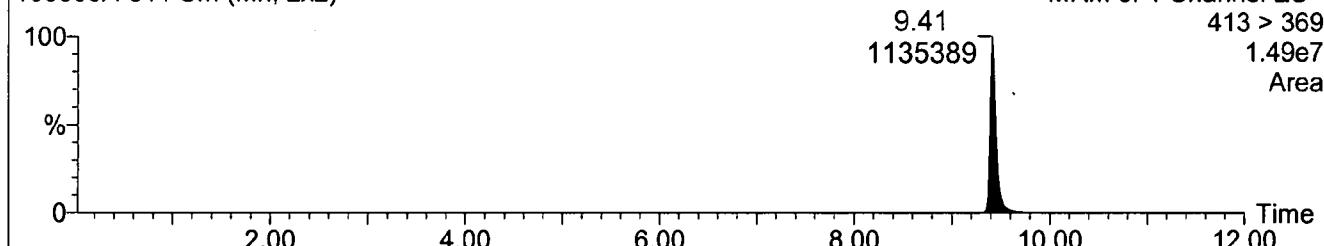
100305A-811 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

1.49e7

Area



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 12

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Wat

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

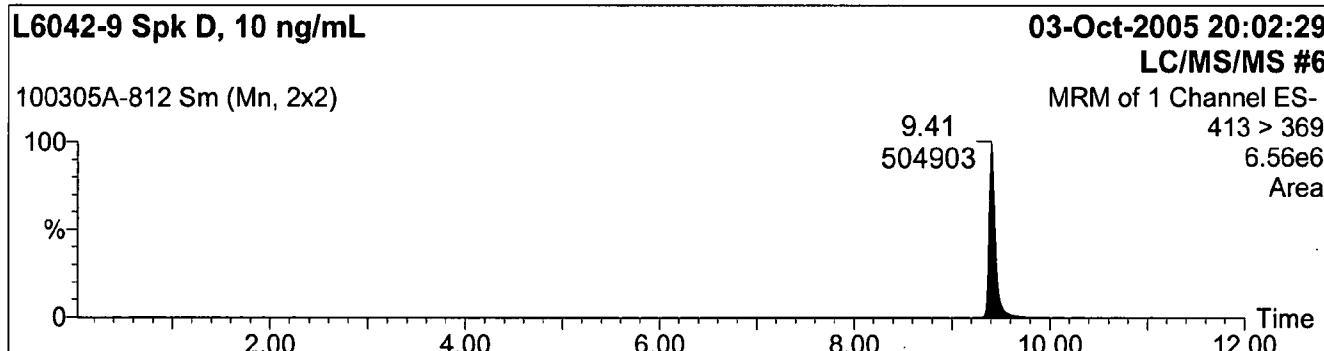
Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-812

Text:

1: C8 Acid



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 13

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-813

Text:

1: C8 Acid

C033105-6, 0.2 ng/mL Standard

03-Oct-2005 20:24:16

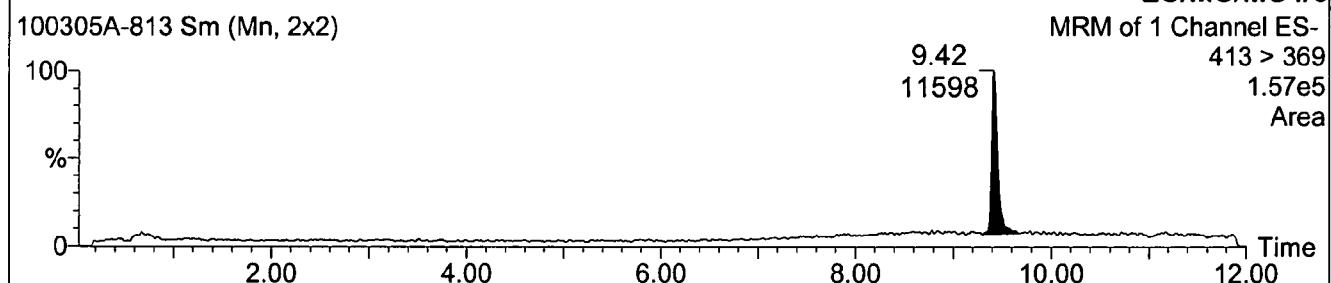
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

1.57e5

Area



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 14

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-814

Text:

1: C8 Acid

C033105-5, 0.5 ng/mL Standard

03-Oct-2005 20:45:54

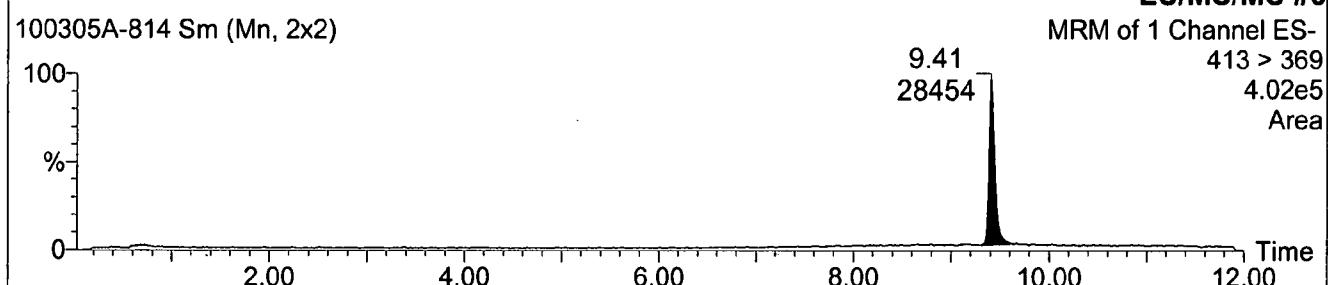
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

4.02e5

Area



Quantify Sample Report

Page 15

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-815

Text:

1: C8 Acid

C033105-4, 1.0 ng/mL Standard

03-Oct-2005 21:07:34

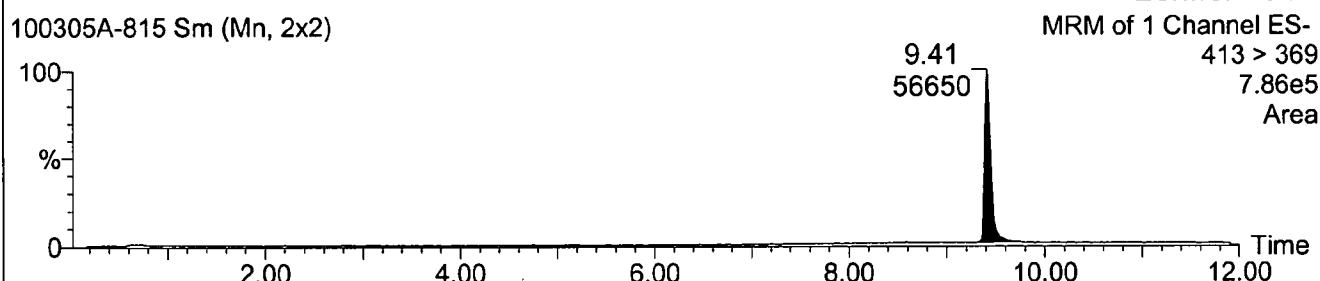
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

7.86e5

Area



Quantify Sample Report

Page 16

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-816

Text:

1: C8 Acid

Methanol Wash

100305A-816 Sm (Mn, 2x2)

100

%

2.00

4.00

6.00

8.00

10.00

12.00

9.42
2342

03-Oct-2005 21:29:16

LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

3.60e4

Area

Time

Quantify Sample Report

Page 17

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-817

Text:

1: C8 Acid

L6042-4, Rep

03-Oct-2005 21:50:50

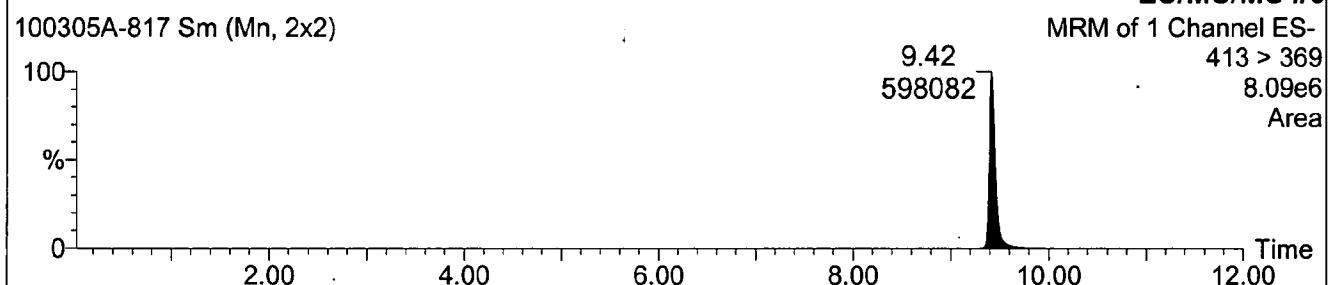
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

8.09e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 18

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

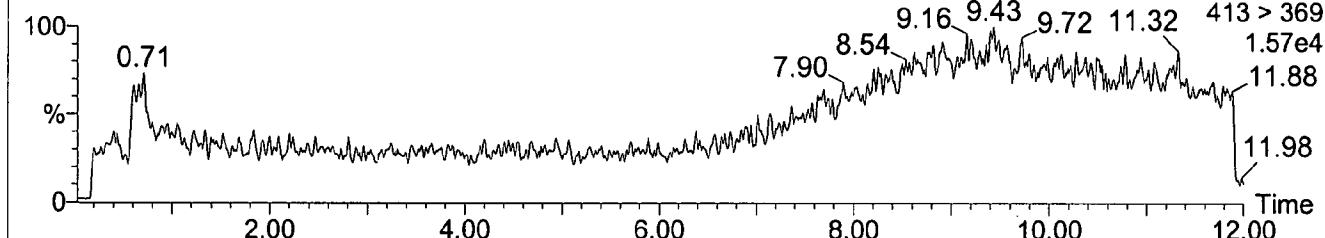
Name: 100305A-818

Text:

1: C8 Acid

L6042-9, Rep

100305A-818 Sm (Mn, 2x2)



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 19

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-819

Text:

1: C8 Acid

C033105-3, 5.0 ng/mL Standard

03-Oct-2005 22:34:28

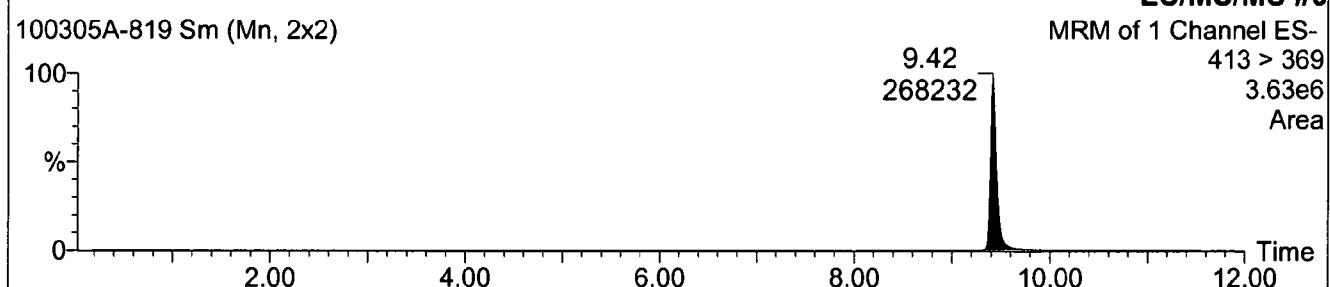
LC/MS/MS #6

MRM of 1 Channel ES-

413 > 369

3.63e6

Area



Quantify Sample Report

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Page 20

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-820

Text:

1: C8 Acid

C033105-2, 10 ng/mL Standard

03-Oct-2005 22:56:13

LC/MS/MS #6

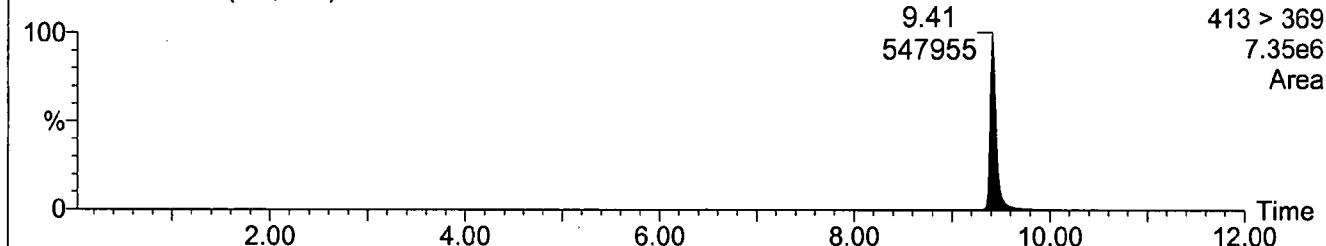
100305A-820 Sm (Mn, 2x2)

MRM of 1 Channel ES-

413 > 369

7.35e6

Area



Quantify Sample Report

Page 21

Study No.:L6042, Set No.:100305A, Ext.Date:NA, Analyst:K.Risha

Sample List: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\SampleDB\100305A Taconic Water

Last modified: Tue Oct 04 10:37:47 2005

Method: P:\Data\LCMSMS6\Masslynx\Fluorochemicals.PRO\MethDB\PFOA 12 min 040805

Last modified: Fri Apr 15 09:21:49 2005

Job Code:

Printed: Tue Oct 04 10:46:21 2005

Name: 100305A-821

Text:

1: C8 Acid

C033105-1, 50 ng/mL Standard

03-Oct-2005 23:17:57

LC/MS/MS #6

100305A-821 Sm (Mn, 2x2)

MRM of 1 Channel ES-

100

%

0

2.00

4.00

6.00

8.00

10.00

12.00

9.42
2456739

413 > 369
3.23e7
Area

Time